DOCUMENT RESUME

ED 141 624　　　　　　　　　　　　　　CE 011 918

AUTHOR	Andrisani, Paul J.; And Others
TITLE	Work Attitudes and Labor Market Experience: Evidence from the National Longitudinal Surveys.
INSTITUTION	Temple Univ., Philadelphia, Pa. School of Business Administration.
SPONS AGENCY	Employment and Training Administration (DOL), Washington, D.C.
PUB DATE	May 77
GRANT	DL-21-42-75-06
NOTE	315p.; Tables may be of marginal legibility due to small print; Study directed by Center for Labor and Human Resource Studies of Temple University, School of Business Administration
AVAILABLE FROM	National Technical Information Service, Springfield, Virginia 22151
EDRS PRICE	MF-$0.83 HC-$16.73 Plus Postage.
DESCRIPTORS	Age; Employment; *Employment Experience; Employment Patterns; Industrial Relations; *Job Satisfaction; Labor Market; *Motivation; Occupational Mobility; Personnel Management; Productivity; Race; Sex Differences; Social Science Research; Trend Analysis; Wages; *Work Attitudes
IDENTIFIERS	United States

ABSTRACT

A study was done to examine the influence of several work attitudes on a number of facets of subsequent labor market experience, as well as the influence of labor market experience on the work attitudes. Based on interview data on about 20,000 respondents from the National Longitudinal Surveys representative national samples of men 14 to 24 and 45 to 59, and women 14 to 24 and 30 to 44, analysis revealed consistent and systematic effects of a number of work attitudes on the respondents' subsequent success in the world of work over the next two to five years. Additionally, the data provided considerable support for the hypothesis that success and failure in work roles help shape the work attitudes people come to hold. Confidence in these findings is strengthened by the fact that the observed relationships were independent of individual differences in skills, abilities, and demographic distribution, and were obtained on the basis of longitudinal as well as cross-sectional data. (Author/EM)

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This report was prepared for the Employment and Training Administration, U.S. Department of Labor, under research and development grant No. 21-42-75-06. Since grantees conducting research and development projects under Government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The grantee is solely responsible for the contents of this report.

CE 011 918

BIBLIOGRAPHIC DATA SHEET	1. Report No. DLMA 21-42-75-06	2.	3. Recipient's Accession No.

4. Title and Subtitle
WORK ATTITUDES AND LABOR MARKET EXPERIENCE: Evidence from the National Longitudinal Surveys

5. Report Date
May 15, 1977

6.

7. Author(s) Paul J. Andrisani, Principal Investigator; Eileen Appelbaum; Ross Koppel; Robert C. Milius (The Ohio State Univ.)

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
Center for Labor and Human Resource Studies
Temple University
Philadelphia, Pa. 19122

10. Project/Task/Work Unit No.

11. Contract/Grant No.
DL 21-42-75-06

12. Sponsoring Organization Name and Address
U.S. Department of Labor
Manpower Administration
Office of Research and Development
1111 20th St., N.W., Washington, D. C. 20210

13. Type of Report & Period Covered
Final

14.

15. Supplementary Notes
To be published in Praeger Special Studies Series on Labor

16. Abstracts This study examined the influence of several work attitudes on a number of facets of subsequent labor market experience, as well as the influence of labor market experience on the work attitudes. Utilizing available data on about 20,000 respondents from the National Longitudinal Surveys representative national samples of men 14 to 24 and 45 to 59, and women 14 to 24 and 30 to 44 at the initial interview dates, the study observed consistent and systematic effects of a number of work attitudes on the respondents subsequent success in the world of work over the next two to five years. Additionally, the data also provide considerable support for the hypothesis that success and failure in work roles help shape the work attitudes people come to hold. Confidence in these findings is strengthened by the fact that the observed relationships were independent of individual differences in skills, abilities, and demographic distribution, and were obtained on the basis of longitudinal as well as cross-sectional data.

17. Key Words and Document Analysis. 17a. Descriptors Attitudes, Earnings, Employment, Job Satisfaction, Industrial Relations, Labor, Manpower, Motivation, Personnel Management, Productivity

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group 5A, 5C, 5E, 5I, 5J, 5K

18. Availability Statement Distribution is unlimited.
Available from National Technical Information Service, Springfield, Va. 22151.
Praeger Publishers, 111 Fourth Ave., New York 10003

19. Security Class (This Report)
UNCLASSIFIED

20. Security Class (This Page
UNCLASSIFIED

21. No. of Pages
255

22. Price

FOREWORD

The principal purpose of this volume has been to examine empirically, by way of the available data from the National Longitudinal Surveys (NLS), the role of work attitudes, particularly job satisfaction, in the dynamics of labor market experience. This volume draws upon all of the surveys from the NLS that were available for public use as of the autumn of 1975. In some instances, thanks to the generous assistance of Gilbert Nestel of The Ohio State University Center for Human Resource Research, data from subsequent NLS surveys also have been made available to us. As such, the volume represents what is to my knowledge the first study that has brought evidence from each of the NLS cohorts to bear upon a single subject.

Without absolving ourselves of any responsibility for errors or omissions that may remain, we wish to acknowledge our debt to a large number of persons who have given generously of their time and assistance in making substantive comments on various aspects of the study. This group includes researchers from the disciplines of economics, industrial relations, psychology, and sociology. Their comments have emanated from informal discussions, faculty workshops, professional association meetings, the refereeing of journal articles, and from reviewing earlier drafts of various chapters. The economists include Hilda Kahne, Ray Marshall, Stanley Masters, Gilbert Nestel, Herbert Parnes, and Seymour Wolfbein; those from industrial relations are Walter Gershenfeld, Richard Leone, Joseph Loewenberg, and George Strauss; the psychologists are Ronald Abeles, Robert Foster, Gerald Gurin, Robert Quinn, and Richard Schorr; and the sociologists are Bert Brim, Stuart Garfinkle, Melvin Kohn, Elliott Liebow, Matilda White Riley, Melvin Seeman, and Harold Sheppard.

To Gilbert Nestel, Herbert Parnes, Seymour Wolfbein, Gerald Gurin, and Stuart Garfinkle a special debt is owed. Not only have their keen insights and suggestions at countless points been invaluable, their encouragement has been a constant source of inspiration, more than they will ever know. Similarly, a special debt of gratitude is owed to Robert Foster of the Department of Labor. His patience and good humor have spared me considerable embarrassment each time it was necessary to request an extension of the project's deadline. More importantly, however, these qualities in Dr. Foster made it possible to resist the almost irresistible temptation to finish for its own sake.

I am also indebted to a highly motivated, dedicated, and competent corps of students and staff. Perhaps most of all, this project has benefited from the conscientious assistance of Howard Johnson, Loretta Stratoti, and Grace Tappert. The professionalism and craft pride they took in their work was truly impressive to watch. Each was intimately involved in virtually every phase of the project, from the typing of the various drafts of the volume to the preparation of the nearly twenty papers from the study that have either been published or presented at professional association meetings. Others involved at various stages and to whom a note of thanks is due include Lois Davies, Marie McGrath, and Lawrence Viotti, who conscientiously performed clerical duties and provided research assistance; Deborah Lurie and Frank Rybicki who mediated skillfully between us and the computer; and Mrs. Maria Kelly who assisted me in the final editing of the volume. It was truly our good fortune to have had such a competent and cheerful staff in this endeavor as they.

Finally, to our spouses and families, we of course owe a special debt of gratitude. They, perhaps more than we ourselves, have borne the major costs of this research. Thus, as principal investigator, I dedicate this volume to all of them, but particularly to my own wife, Barbra, and to my three children, Nathan, Damian, and Danielle.

May 1977

Paul J. Andrisani
Principal Investigator

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CHAPTER I

INTRODUCTION AND OVERVIEW

Paul J. Andrisani

I. INTRODUCTION

Over the past several years, a growing number of studies have speculated that there has been a sharp increase in job dissatisfaction and a dramatic change in work ethic among members of the nation's work force.[1] The central thesis of these studies is developed essentially along the following lines: as a result of extensive division of labor, centralization of decision making, and excessive organizational bureaucracy, coupled with rising levels of income and education, worker aspirations and expectations for meaningful work have outstripped the inherent potential of many existing jobs. As a consequence, job frustrations supposedly have generated an inordinate degree of dissatisfaction, disillusionment, and alienation which is impairing productivity as well as spilling over into nonworking lives.

Labor unrest, theft, sabotage, absenteeism, and turnover have all been offered as examples of ways in which dissatisfaction has impaired productivity. Poor mental health, family instability, political extremism, alcoholism, and drug addiction are thought to be ways in which it has spilled over into nonworking lives. Moreover, dissatisfaction purportedly exists across the entire occupational spectrum, from blue collar workers to white collar workers in both professional and managerial job classifications.[2]

Proponents of this thesis have attempted to buttress their position by pointing to a 10 point drop in job satisfaction measured by Gallup Polls from 1969 to 1972, to decreased output per manhour, and to an increased incidence of industrial accidents, absenteeism, turnover, and work stoppages attributable to nonwage aspects of employment.[3] As a remedy, they have called for far-reaching changes in corporate and public policies that hopefully would improve the "quality of working lives."[4] Their recommendations range from the reduction of unemployment to proposals calling for extensive technological change, and for the basic reorganization of the workplace to provide for fulfillment of the higher order social-psychological needs of workers.

---

[1] See, for example: Work in America (1972); Worker Alienation (1972); Blauner (1964); Davis and Trist (1973); Sheppard and Herrick (1972); and Walton (1972).

[2] See, for example: Work in America (1972); and Worker Alienation (1972).

[3] See Strauss (1974) and Flanagan et al. (1974) for a summary of these positions.

[4] Davis and Cherns (1975).

Those who maintain this position of a changing work ethic and a resultant rise in levels of job dissatisfaction argue that it is particularly prevalent among the young, women, and blacks. The problem thus is thought to be exacerbated by recent demographic changes in the composition of the work force. In increasing numbers these minority groups are seen to be entering or reentering the work force in pursuit of self-expression and personal fulfillment, as well as a means of earning a living. Furthermore, there is also seen to be a changing "mood" on the part of youth, women, and blacks, as they presumably are less willing to accept second-class status in the labor market.[5] Thus, to the extent that they have begun to scrutinize more closely the inequality and discrimination they face in the job market, they have, in theory, become more dissatisfied with their unequal share of the labor market's rewards.

With the specter of mounting worker dissatisfaction and alienation has come a growing public policy concern for the degree to which social and economic institutions serve the psychological needs of workers. Furthermore, an interest has developed in ascertaining the degree to which attitudes toward work affect the labor market behavior and economic circumstances of individuals. To the extent that job dissatisfaction and worker alienation affect productivity, for instance, they impose economic costs on employers and the larger society, as well as on the individuals whose productive capacities are underutilized. Perhaps more importantly, since the economic costs of worker dissatisfaction appear more serious during periods of economic prosperity than during a downturn, there is reason to question the prospects for sustained economic growth and full employment at stable prices as the economy expands.

The study of the role of worker attitudes in the dynamics of employment experience is undoubtedly important, irrespective of the recent controversy over job dissatisfaction and worker alienation. Attitudes of the young may influence occupational choice, preparation for work, and attractiveness to employers in ways that may ultimately determine the degree to which youth become successfully accommodated to the labor market. Changing attitudes toward work also may have had much to do with such important developments since World War II as the steady decline in labor force participation rates among middle-aged men, the rapid rise in labor force participation rates among adult women of all ages, and the steady decline in fertility rates among women of childbearing age.

In addition, contrary to the implicit assumptions of the vast majority of labor market studies, the attitudes which workers come to possess not only affect, but also are affected by labor market forces. That is, work attitudes are endogenous to the functioning of the marketplace and their treatment solely as exogenous variables understates the role of market forces in shaping the experience and attitudes of individuals.[6] Yet the influence of success and failure in the labor market on the aspirations, expectations, and motivation of workers, and on the attitudes of disadvantaged workers in particular, thus far has received little empirical attention.

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[5] Strauss (1974); and Flanagan et al. (1974).

II. OBJECTIVES OF THE RESEARCH

Foremost among the numerous objectives of the study is an analysis of three broad sets of empirical questions that shed light on the role of worker attitudes in the dynamics of employment experience and address major issues in the recent "quality of work" controversy. First, the study seeks to ascertain whether individual differences in a number of work-related attitudes are systematically related to differences in subsequent labor market experience among workers who are comparable in terms of a wide range of dimensions of skills, abilities, and demographic characteristics. Thus, we are testing whether these attitudes add to our understanding of the process of labor market attainment, or whether they merely reflect personal and demographic differences among workers that give rise to labor market experience. For instance, are differences in job satisfaction, expectations, aspirations, "tastes" for economic versus noneconomic rewards, and commitment to work in one period related to such experiences as turnover, unemployment, withdrawal from the work force, and occupational and earnings advancement in the next?

Second, how do people feel about a variety of aspects of work, and are any trends apparent? For example, what are the actual reasons that workers offer for both their satisfaction and dissatisfaction with work? In general, what has work come to mean to the nation's work force? In particular, what has it come to mean to those who are dissatisfied with their jobs? Is dissatisfaction with pay, hours of work, and working conditions less apparent than dissatisfaction with the "meaninglessness" of work? Is there evidence of changing preferences or "tastes" for various aspects of work which may possibly signal a changing work ethic?

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[6] As Glen Cain (1975, pp. 18-19) has recently noted, perhaps the most important contribution to emerge from the challenge of the dual labor market theory to orthodox theory is precisely in this regard. In Cain's words: "Conventional economists have customarily viewed 'tastes' as exogenous and as one of the (unexplored) causal variables explaining such labor market achievements as employment, wage earnings and occupational achievement. The contribution of the Dual-Radical theories lies not in reiterating the potential importance of tastes in their research, but rather in pointing out how tastes may be endogenous and a result of one's labor market achievements. Thus, the effects of discrimination, other systematic factors, or even random factors that can start workers off in the secondary sector (that is, in 'bad' jobs), can shape tastes in an anti-work direction and thus reinforce the disadvantaged position of low-wage workers." (Emphasis in original.)

Third, what characteristics of jobs and workers are systematically related to important work attitudes? More importantly, to what extent does one's labor market experience condition changes in attitudes toward work? Can an understanding of differences in work attitudes between the young and middle-aged, between men and women, and between whites and blacks contribute to a better understanding of the marked differences in their labor market experience? These are the major issues to which this volume is addressed.

III. DESCRIPTION OF THE DATA BASE

To a considerable degree, research efforts into issues such as these have been hampered historically by the unavailability of longitudinal data on large national samples. Without longitudinal data it is not possible to examine either the relationship between work attitudes and subsequent labor market experience, or the relationship between change in attitudes and labor market experience. An example of the unique contribution that longitudinal analysis can make is provided by a consideration of the relationship between job satisfaction and employee turnover. On the basis of a single survey, the only way this relationship could be examined would be by way of a retrospective measure of job satisfaction, in which case dissatisfaction may be expressed as a *post hoc* rationalization for having left one's job.

As another example, it is not possible to examine the influence of adverse labor market experience on the motivation of workers unless one knows their motivation both before and after the adverse experience. Moreover, without large national samples it is not possible for age, sex, or race differences in findings to be examined carefully, nor is it possible to generalize from the sample to the population as a whole.[7]

The data for this study are from the National Longitudinal Surveys (NLS). Begun in 1966, the NLS is a 10-year longitudinal study of the work experience of four age-sex cohorts of the population, each of which consists of roughly 5,000 respondents: men 45 to 59, women 30 to 44, and young men and women 14 to 24 years of age at the date of the initial interviews. The samples in each case constitute a representative national probability sample of the noninstitutionalized civilian population of the particular cohort as of the first survey date. The samples were drawn and personal interviews conducted by the U.S. Bureau of the Census for The Ohio State University Center for Human Resource Research under separate contracts with the U.S. Department of Labor.[8]

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[7] While not the only issues, clearly these are among the more important ones. Yet, no doubt because of the costs involved in doing otherwise, two of the most carefully designed national studies of worker attitudes have employed cross-sectional designs and sampled fewer than 160 blacks to represent the entirety of the black work force. These were the *1969-70 Survey of Working Conditions* and the *1972-73 Quality of Employment Survey*. Sample sizes for each are presented in Quinn et al. (1974, p. 50). For reviews of other research addressing these issues, virtually all of which is limited in these same respects, see: Carroll (1973); Locke (1976); and Taylor et al. (1974).

Stated succinctly, the NLS data include "an abbreviated lifetime work history of each respondent up to the time of the first survey, a detailed work history during the period covered by the surveys, and information about a variety of social, psychological, and economic characteristics of the respondents that are hypothesized to influence labor market behavior."[9] Originally planned to cover a five-year period, the surveys have been "so successful and attrition so small that they have been continued beyond the originally planned expiration dates."[10] As of the end of 1976, the older cohort of men had been interviewed in 1966, 1967, 1968 (mail), 1969, 1971, 1973 (telephone), 1975 (telephone), and 1976; the older cohort of women in 1967, 1968 (mail), 1969, 1971, 1972, 1974 (telephone), and 1976 (telephone); the young men in 1966, 1967, 1968, 1969, 1970, 1971, 1973 (telephone), 1975 (telephone), and 1976; and the young women in 1968, 1969, 1970, 1971, 1972, 1973, and 1975 (telephone).[11]

In order to permit statistically reliable estimates for blacks, in each of the four cohorts blacks have been oversampled by a ratio of roughly 3 to 1.[12] Virtually all of the data analysis reported in this volume is therefore presented separately for each of the four age-sex cohorts and, within each cohort, separately for whites and blacks as well.[13] Thus, the NLS makes it possible to examine the social-psychological and economic well-being of workers from a vantage point not previously enjoyed by researchers, since there are indeed few, if any, longitudinal data bases on large national samples that have the combined breadth of attitudinal measures and work history detail.

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[8] For an overview of the entire NLS data base, including a complete description of the sampling design, interviewing procedures, and the host of included variables, see: The National Longitudinal Surveys Handbook (1975).

[9] Parnes et al. (1975b, p. 5).

[10] Parnes et al. (1975b, p. iii).

[11] Unless otherwise noted, all interviews were personal interviews.

[12] A small proportion of each cohort represents nonwhite-nonblacks. Since there were too few to permit separate analysis for these respondents, only data for the whites and blacks have been analyzed in this volume.

[13] It also should be noted that throughout the volume all calculations (percentage distributions, means, regression coefficients) are based upon observations weighted by the probability of their being in the sample. All tables, however, report the actual number of sample cases upon which the calculations are based.

Moreover, since each cohort has historically encountered special labor market difficulties that are challenging to policy makers, the study of the role of work attitudes in the dynamics of labor market experience assumes an added dimension as it is examined in the context of these special labor market problems. For the two cohorts of youth, the special difficulties stem from the high unemployment rates generally accompanying entry into the labor market.[14] For the older cohort of women, the problems are associated with sex discrimination and with reentry into the work force after children become of school age.[15] Lastly, skill obsolescence, age discrimination, and the onset of health limitations that inevitably occur during the middle years are among the special difficulties facing men as they approach retirement age.[16]

The richness of the NLS data is not, however, without limitation. Most notably, the data are limited since they do not cover all ages of the work force. Also, they rely in many cases on single-question measures of work attitudes. The potential difficulty with this is that the reliability of an attitude scale places an upper bound on the predictive validity of the measure.[17] Consequently, where insignificant relationships between a particular attitudinal measure and selected criteria are observed, it is not possible to ascertain unambiguously whether real relationships do not exist or whether they were attenuated too greatly by an unreliable attitudinal measure. Relationships between work attitudes and labor market experience discovered with the NLS data, therefore, are undoubtedly understated.

Nonetheless, that research which has been done with these data shows strong and systematic relationships between attitudinal variables and aspects of work experience.[18] For example, Parnes et al. (1975a, Ch. 3) have shown that among middle-aged men dissatisfied workers are subsequently nearly 3 times as likely as highly satisfied workers to voluntarily change employers in an expanding economy, and nearly 2 and 1/2 times as likely in a recessionary economy. Thus the relationships between work attitudes and labor market experience apparently are strong enough to be captured even by very straightforward measures of work attitudes.

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[14] Published work from the NLS addressing the educational and labor market experience of the two youth cohorts include: Parnes et al. (1970a); Zeller et al. (1971); Kohen and Parnes (1971); Kohen and Andrisani (1973); Andrisani and Kohen (1975); Shea et al. (1971); Roderick and Davis (1973); Roderick and Kohen (1974).

[15] Published work from the NLS based on this cohort include: Shea et al. (1970); Shea et al. (1973); Jusenius and Shortledge (1975); and Parnes et al. (1975b).

[16] Published work from the NLS on this cohort include: Parnes et al. (1970b); Parnes et al. (1970c); Parnes et al. (1973); and Parnes et al. (1975a).

[17] See, for example: Nunnally (1967) and McNemar (1969).

[18] References to these studies may be found in footnotes 14, 15, and 16.

This volume draws upon all of the surveys from the NLS that were available for public use as of the autumn of 1975. This includes information obtained from the 1971 interviews with the older men and women, the 1970 interviews with the younger women, and the 1969 interviews with the younger men. As such, it represents what is to my knowledge the first study that has brought evidence from each of the cohorts to bear upon a single subject.

IV. PLAN OF THE VOLUME

Although there are obvious advantages to be derived from organizing the next three chapters on the basis of the three broad sets of empirical questions to which this volume is addressed, the complexity and the enormity of the data preclude this approach. Consequently, the remainder of the volume consists of seven chapters, six of which present the empirical findings and the seventh a discussion, summary, and conclusion.

In the next two chapters the data pertaining to job satisfaction are presented. Chapter II examines empirically the extent to which dissatisfied workers differed from comparable workers who were satisfied with their jobs in terms of subsequent mobility and other aspects of labor market experience. The extent to which these workers differ provides insight into the costs--e.g., in terms of increased turnover, increased unemployment, and a greater tendency to withdraw from the work force--that could possibly be avoided by greater attention to the factors which cause job dissatisfaction. Furthermore, Chapter II also examines the extent to which the costs of job dissatisfaction stem from a greater degree of turnover among the dissatisfied, from their disproportionate relegation to jobs that are lower in status or earnings than those of comparable others, or from their failure to be mobile when dissatisfied with their employment situation. The extent to which the costs stem from these sources points clearly to the need for reduction of barriers which impede the mobility process from attaining an optimal allocation of human resources and from maximizing the job satisfaction of workers.

For each of the cohorts, Chapter III examines levels and trends in job satisfaction during the period for which the NLS data are available. The chapter also examines differences in levels and trends in job satisfaction by occupation, industry, and earnings, as well as by a variety of personal and demographic characteristics. Furthermore, it investigates the extent to which observed trends reflect changes in the composition of the work force, a changing work ethic, or changes in the circumstances of the respondents during the late 1960's and early 1970's.

In Chapter IV, the relationship between "perceived internal-external locus of control" and work experience is examined. "Internal-external" attitudes tap the perceived payoff to initiative and have therefore received considerable attention in the psychological and sociological literature as a generator of initiative. Although there has been little evidence from which to judge, there are some who suggest that white-black differences in labor market experience stem mainly from racial differences in work ethic attitudes closely resembling the internal-external distinction. The Coleman Report, for example, observed individual differences in internal-external attitudes to be the best predictor of academic achievement among blacks.[19] In fact, differences in these attitudes were found to be a more important factor in explaining achievement among black youth than all of the differences in school quality and family background combined. The concept of internal-external attitudes is also of interest because of its similarity to the concept of alienation, particularly in the sense of perceived powerlessness.[20] It is, for example, the variant of alienation most prominent in the early writings of Marx.[21]

The purpose of Chapter V is to examine the relationship between a number of other work-related attitudes available in the NLS data and labor market experience. The chapter first examines the respondent's attitudes and their relationship to a variety of aspects of subsequent work experience. Then, the relationship between labor market experience during the course of the period and change in attitudes is explored. Some of the attitudinal variables considered in the analysis include occupational aspirations, expectations for attaining occupational goals, commitment to work, and "tastes" for economic versus noneconomic rewards.

Chapter VI extends the analysis in the preceding chapter to the role of work attitudes in the process of early labor market attainment. Confining the sample to that subset of the two youth cohorts which were enrolled in school at the first survey date, the chapter examines the relationship between work attitudes that have not been fashioned by labor market experience and success in the world of work during the early stages of labor market careers. The chapter then compares the findings for young men and women, and examines an hypothesis derived from a recent study by Mincer and Polachek (1974), that much of the male-female earnings differential generally attributed to sex discrimination in the labor market results from a weaker commitment to work among women.

The last of the empirical chapters, Chapter VII, examines the information from the NLS concerning what workers "liked best" and "disliked most" about their jobs both at the beginning and end of the period. Focusing upon differences in responses to these questions between workers who are satisfied with their jobs and those who are dissatisfied, the chapter seeks to shed further light on the sources of job satisfaction and dissatisfaction, and on whether there have been substantial changes in preferences for various aspects of work during the late 1960's and early 1970's. It also examines whether a number of characteristics of individuals, jobs, and changing labor market circumstances are associated with the changes in preferences and "tastes" that are observed.

Chapter VIII, the last chapter, draws together the principal findings of the volume and discusses their implications for labor market research and for public policy.

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[19] Coleman et al. (1966).

[20] Seeman (1959; 1972a; 1972b).

[21] See, for example: Faunce (1968, Ch. 3), and Rotter (1966).

CHAPTER II

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED WORKERS IN SUBSEQUENT LABOR MARKET EXPERIENCE

Paul J. Andrisani

I. INTRODUCTION

Job satisfaction, particularly as it relates to employee turnover, has been the subject of more than 3,350 articles, books, and dissertations.[1] Although there are no specific data available that indicate how costly voluntary turnover is to American employers as a whole, there is a general consensus that the aggregate costs are very high, especially when the economy is buoyant. Moreover, the link between job satisfaction and turnover has long been well established, since virtually all literature reviews have concluded that dissatisfied workers have a greater incidence of turnover than satisfied workers.[2]

As Quinn et al. (1974, p. 24) have noted, however, the vast majority of the studies suffer from one or more of three basic limitations: (1) they rely heavily on retrospectively gathered data from former employees, whose job dissatisfaction may be a post hoc rationalization for having left their job; (2) they are based on small samples, usually from only a single firm, and therefore have limited potential for generalization; and (3) they usually fail to control for factors other than job dissatisfaction which also may account for turnover. In addition, little is apparently known about possible differences between satisfied and dissatisfied workers in subsequent labor market experience, particularly those differences which may stem from a greater incidence of turnover among the dissatisfied.

One of the few research efforts that permits an analysis of these issues unencumbered by the usual limitations is the National Longitudinal Surveys (NLS). As previously noted, however, the NLS data are not without limitation. Although the data are longitudinal and comprise national samples, for instance, they do not include all ages of the work force. Also, they rely on a single-question, global measure of job satisfaction: "How do you feel about the job you have now? Do you: (1) Like it very much? (2) Like it fairly well? (3) Dislike it somewhat? or (4) Dislike it very much?" Relationships observed between job satisfaction and subsequent labor market experience with the NLS data, therefore, are undoubtedly understated.

The principal purpose of this chapter is to utilize the NLS data to shed light on the costs of job dissatisfaction by examining differences in subsequent turnover and labor market experience between workers who were satisfied with their jobs and those dissatisfied at the initial survey date.[3] First, the chapter examines differences between satisfied and dissatisfied workers in subsequent turnover, and in six additional aspects of subsequent labor market experience as well. These include: (1) change in occupational status, (2) change in earnings, (3) unemployment, (4) labor force participation, (5) completion of formal occupational training, and (6) geographic mobility. Second, it examines the extent to which differences in subsequent labor market experience between satisfied and dissatisfied workers result from the disproportionate relegation of the dissatisfied to jobs that are lower in status and earnings than those of comparable others, or from a greater tendency of the dissatisfied to change employers. In each case it examines the extent to which the differences observed are independent of individual differences in a wide range of personal and demographic characteristics, and the extent to which they vary by age, sex, and race.

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[1] See: Locke (1976).

[2] See, for example: Brayfield and Crockett (1955); Herzberg et al (1957); Vroom (1964); and Mangione (1973).

II. CONCEPTUAL FRAMEWORK

In conventional labor market theory, differences in economic rewards, signifying differences in contribution to social product as measured by the market, operate to draw workers from less rewarding to more rewarding work activities.[4] Changes in the structure of demand for labor, responding to changes in market conditions, are presumed to alter the structure of economic rewards and thus to produce movement of workers into and out of the work force, as well as among firms, occupations, industries, and geographic areas in response. Wage competition among employers, each seeking to maximize profits by hiring additional workers so long as it is efficient and profitable to do so, and each forced by competitors to seek the most efficient mode of production possible, provides opportunities for individuals to put their talents to best use. Concomitantly, competition among workers, each seeking to maximize utility, causes any inequality in wages at equilibrium to be only enough to compensate for differences in the quality of labor or differences in the nonwage attractiveness of jobs.[5]

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[3] It should be kept in mind throughout the remainder of the chapter that the initial survey dates were not in the same year for each of the cohorts comprising the NLS. For both cohorts of men, the initial survey was conducted in the latter part of 1966. For the older cohort of women, the initial survey was in 1967; and for the younger cohort of women it was in early 1968. It should also be noted that the data from subsequent interviews were not as accessible for the two youth cohorts as for their older counterparts. As of Autumn, 1975, the NLS data available for public use included the 1971 surveys for the older men and women, the 1970 survey for the young women, and the 1969 survey for the young men. "Subsequent labor market experience" thus refers to a five-year period for older men (1966-1971), a four-year period for the older women (1967-1971), a three-year period for the younger men (1966-1969), and a two-year period for the younger women (1968-1970).

[4] For a fuller treatment of conventional labor market theory, see Parnes (1954; 1968); Reynolds (1951; 1974); and Rottenberg (1956).

So long as there are no barriers to the mobility of labor, any disparity in wage among comparable workers that was not attributable to differences in the nonwage attractiveness of jobs would serve to draw workers from their lower paying jobs to higher paying ones. This flow of workers has the self-adjusting effect of reducing the disparity that initially gave rise to the movement and thereby restoring equilibrium. In this way the mobility process allows a competitive labor market to achieve and maintain an optimal allocation of human resources, while permitting workers to maximize their satisfaction. Mobility will continue until equilibrium is achieved, and no worker could enhance either his or her own satisfaction or the total social product by making any kind of job change.

Mobility, however, can be a costly process. Since labor market information is not free, those who change jobs may incur more unemployment as part of the costs of job search.[6] Workers also may be required to relocate and to receive additional training in order to shift to more satisfying jobs. Part of the costs of job changing will also be borne by employers, who must pay for the recruitment, selection, and training of replacements,[7] and by society which will incur a loss of output during periods of transition.[8] Furthermore, while the "net" flow of workers may "tend" toward equilibrium, all mobility is not functional since mobility can result from mistakes on the part of workers and employers.

Moreover, where mobility is restricted because of labor market barriers--e.g., discrimination, seniority agreements, or pensions which are not fully vested--it is impossible for the labor market to maximize worker satisfaction or to optimally allocate labor. Indeed, the economic, social, and psychic costs that stem from barriers to mobility and the resultant misallocation of human resources may be substantial, and they too must be shared by workers, employers, and by society. To workers, the costs may be lower earnings and greater job dissatisfaction, since all are not in the jobs for which they are best suited. To employers and to society, the costs incurred are reduced productivity.

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[5] The classic statement of the notion that wage differentials in equilibrium are compensatory, or "equalizing differences," is perhaps to be found in Rottenberg (1956).

[6] Even among middle-aged men who voluntarily changed employers, Parnes and Nestel (1975, pp. 103-113) observed a greater incidence of unemployment than among their counterparts who did not make a job change.

[7] Economic analyses of these costs and their relationship to mobility and earnings may be found in Oi (1962); Becker (1964); Parsons (1972); and Doeringer and Piore (1971, Ch. 2).

[8] A more complete discussion of the costs of turnover for workers, employers and society may be found in Quinn et al. (1974).

It is precisely these limitations of the mobility process that have given rise to the recent controversy over worker dissatisfaction, and to the "dual labor market theory" as a major challenge to conventional theory. In the job dissatisfaction controversy, the volume and costs of turnover have been characterized as needlessly high and a direct result of managerial inattention to the varied and changing preferences of workers.[9] When dissatisfied workers are unable to find more satisfying jobs, managerial inattention to job dissatisfaction also has been held responsible for such pathologies as labor unrest, theft, sabotage, absenteeism, low productivity, and numerous social ills.

In the dual labor market theory, the degree of immobility attributable to institutional barriers is focused upon.[10] Regardless of the skills they may acquire, disadvantaged workers are thought to shift endlessly from one dissatisfying job to another, incurring frictional unemployment in the process, without ever advancing to better positions. Rather than their mobility and acquisition of skills providing access to more satisfying jobs, as conventional theory suggests, the disadvantaged are thought to be denied access to the better jobs because of invidious discrimination and "chronic" mobility. The unstable employment histories of disadvantaged workers supposedly have been regarded by employers in the high-wage firms as indications that they would be unreliable employees. Thus, the mobility of disadvantaged workers is thought to reinforce race and class prejudices among employers.

In the dual market theory, the large investments in recruitment, selection, and training that firms in the concentrated, capital-intensive, and high-wage industries must make, and the degree of protection that surrounds workers in these industries, make it risky to hire unreliable workers who would be difficult to dismiss and costly to replace. Thus, stability, rather than mobility, is thought to be the key to entry into such firms and to successful labor market experience as well.

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[9] See, for example: Work in America (1972); Worker Alienation (1972); Blauner (1964); Davis and Trist (1973); Sheppard and Herrick (1972); Walton (1972); and Hamermesh (1975).

[10] For a more complete discussion of the dual labor market theory see: Doeringer and Piore (1971); Piore (1969); Doeringer et al. (1969); Bluestone (1970); Gordon (1971, 1972); Harrison (1971, 1972); Flanagan (1973); Cain (1975); Osterman (1975); Wachter (1974); and Andrisani (1976). As Cain (1975, p. 61) has recently described the major issues of contention: "What here separates orthodox and D-R (dual-radical) economists is largely their differing empirical judgments about the extent and degree of protection that surrounds various groups in the market. Orthodox economists tend to deny as an empirical matter that the labor market is so rife with these protected enclaves that wide differences in rates of return by occupation, industry, and region persist. At least, the differences should not persist for groups of equal endowments, unless nonpecuniary factors are responsible."

III. DIFFERENCES IN SUBSEQUENT LABOR MARKET EXPERIENCE

Discussion of Methods

The data for the study consist of those members of the four NLS cohorts who were employed full-time as wage or salary workers at the initial survey dates. For the two cohorts of youth, the sample is further restricted to only those who were not enrolled in school. In all cases, job satisfaction at the initial survey date is used to examine relationships with work experiences that occurred from the time of the first survey to the time of the last survey for which data are available.[11]

To control for differences between satisfied and dissatisfied workers in skills, abilities, and demographic characteristics, and to examine whether relationships vary by age, sex, or race, separate regression equations have been estimated for each of the eight age-sex-race groups, with dimensions of labor market experience (LME) regressed on the measure of job dissatisfaction (JD) and a number of control variables. The control variables in each regression include:[12] (1) three variables assigned the value 1 or 0 for years of schooling completed--ED9-11, ED12, and ED13+, with 0-8 years of schooling as the reference group; (2) a variable assigned a 1 or 0 for completion of a formal occupational training program (TR); (3) a continuous variable for firm-specific on-the-job training captured by length of service with employer in years (FSOJT); (4) a continuous variable, general on-the-job training, measured in years (GOJT)[13]; (5) a variable assigned a 1 or 0 capturing whether health limits either the kind or amount of work performed (H); (6) a dichotomous variable for marital status (M);[14] (7) a dichotomous variable for residence in the South (S); and (8) two dichotomous variables for degree of urbanization in the local labor market: one for residence in a central city SMSA (URB 1); the other for residence in an SMSA, but not a central city (URB 2), with non-SMSA (RURAL) as the reference group. The job dissatisfaction variable (JD) is coded from 1 to 4 with increasing scores measuring increasing dissatisfaction. The functional specification of the models estimated therefore may be presented as follows:

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[11] For further detail concerning the initial survey dates and the length of the period for which data are available from the NLS, see footnote 3.

[12] Each control variable is measured as of the same date as the job satisfaction measure, the initial survey date.

[13] For the two cohorts of youth, general on-the-job training is approximated as follows: Age - Years of Schooling - 5. For the two older cohorts, however, this variable was constructed in nonlinear form to allow for the peaking and decline in earnings observed during the middle-years in age-earnings profiles. For the older men, two dichotomous variables for ages 50-54 and 55-59 are used to capture differences in general OJT, holding years of schooling constant, with ages 45-49 as the reference group. For the cohort of older women, analogously, two dichotomous variables are also used: namely, one for those ages 35-39 and another for those 40-44, with those 30-34 as the reference group. In addition, another variable also was included in the analysis for the older women to capture the proportion of the years since they had left school that they had worked six months or more.

$$LME_{ij} = b_{ij0} + b_{ij1}JD + \sum_{k=2}^{4} b_{ijk}ED_k + b_{ij5}\,TR + b_{ij6}\,FSOJT$$

$$+\, b_{ij7}GOJT + b_{ij8}H + b_{ij9}M + b_{ij10}S + \sum_{m=11}^{12} b_{ijm}Urb_m + \mu_{ij}$$

where LME_{ij} = the ith dimension of labor market experience examined for the jth age-sex-race group; b_{ijo}, b_{ij1}, . . ., b_{ij12} = the intercept term and regression coefficients for the respective explanatory variables; μ_{ij} = the stochastic error term; and all other terms are as previously defined.

The general model specified above is derived from the human capital model of income distribution developed by Becker (1967) and Mincer (1970). In their model, labor market success, particularly in terms of earnings, is a function of investments in an individual's productive skills and abilities, comprising one's stock of human capital. The principal investments considered in their model are schooling and on-the-job training. Post-school investments in on-the-job training are thought to decline continuously over the course of the life cycle because they require time (opportunity costs) and because the pay-off period during which returns can be realized declines with age. By controlling for schooling and training, as well as for the additional personal and demographic characteristics in the model, we are testing whether knowledge of workers' job satisfaction *adds* to our understanding of the dynamics of labor market experience or whether job satisfaction merely *reflects* human capital and demographic differences among workers that give rise to labor market experience.

Turnover and the six additional dimensions of subsequent labor market experience examined in the regression analyses have been defined operationally as follows: (1) turnover by a variable assigned the value 1 if the respondent made a change of employer during the course of the period examined and 0 otherwise;[15] (2) change in occupational status by the difference in scores on the Duncan (1961) Index of occupational status reported at the initial survey and at the last survey for which data were available;[16] (3) change in earnings by two continuous variables capturing change in hourly wage during the course of the period and change in annual earnings during the period,[17] each measured in dollar amounts; (4) unemployment by three dependent variables capturing experience during the entire period--the first by a continuous variable measuring the actual number of weeks of unemployment reported; the second by a variable assigned the value 1 if the respondent incurred a spell of unemployment during the period and 0 otherwise; and the third by a continuous variable measuring the duration of unemployment during the period for those persons who had at least one spell of unemployment; (5) labor force participation by three dependent variables capturing experience throughout the entire period--the first by a continuous variable measuring the actual number of weeks during which the respondent neither worked nor looked for work; the second by a variable assigned the value 1 if the respondent reported a spell during which he or she had withdrawn from the work force; and the third by a continuous variable measuring the length of time out of the labor force among those respondents who reported a period during

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[14] For the two cohorts of women, the marital status variable has been elaborated somewhat to capture also the presence of children in the household who were not of school age.

[15] The sample for these particular regressions is restricted to only those respondents who were employed at the end of the period. Thus, those dissatisfied workers who subsequently withdrew from the work force by the end of the period will not show up as turnover. Furthermore, only in the case of the

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young women and middle-aged men does turnover pertain to "voluntary" changes of employer. For the other cohorts the NLS data do not distinguish between "voluntary" and "involuntary" separations from the initial survey date employer. Although it is possible to distinguish reasons for job changes from subsequent employers at later survey dates, doing so would have shortened prohibitively the period over which the effects of job dissatisfaction on turnover and other aspects of labor market experience could have been examined. The inclusion of "involuntary" job changes as turnover for the cohorts of younger men and older women should not seriously affect the results of this study, since the NLS data essentially demonstrate that most of the turnover among these cohorts during the 1966-1971 period was "voluntary," and that job dissatisfaction apparently is unrelated to subsequent "involuntary" turnover.

[16] In the regressions on change in occupational status, individual differences in occupational status at the beginning of the period have been controlled for in order to eliminate the potential bias that may result from "regression toward the mean." For these particular regressions the sample is further restricted to only those respondents who were employed at the last survey date, for whom it was possible to make a comparison of occupations over the course of the period.

[17] In the regressions on change in earnings, individual differences in the specific dimensions of earnings (hourly versus annual) at the beginning of the period have been controlled for in order to eliminate the potential bias that may result from "regression toward the mean." For the regressions on change in hourly earnings, the analysis has been performed for only those respondents who were also employed at the last survey date. This restriction on the sample was necessary because wage rates were only reported for those employed at the survey date.

which they had withdrawn from the work force; (6) training by a variable assigned the value 1 if a formal occupational training program had been completed during the course of the period and 0 otherwise; and (7) geographic mobility by a variable assigned the value 1 if the respondent changed residence to a different county or SMSA during the period and 0 if no change was reported.

Empirical Results

The results of the regression analyses with the NLS data are presented by age, sex, and race in Table 2.1. The numbers are regression coefficients expressing the "net" relationships between job dissatisfaction reported at the beginning of the period and each dimension of subsequent labor market experience. Each relationship is "net" because individual differences in educational attainment, formal occupational training, firm-specific on-the-job training, general on-the-job training, health, marital status, region of residence, and degree of urbanization in local labor markets have been statistically controlled for. Each coefficient expresses a longitudinal relationship since job dissatisfaction has been measured prior to the occurrence of the aspects of labor market experience.

Below each regression coefficient in parentheses is its t-ratio, the formal test of statistical significance of the coefficient. Taken literally, the regression coefficients estimate the effect of a 1-point increase in job dissatisfaction on the dependent variable in question. Since the "highly dissatisfied" are 3 points higher on the job satisfaction measure than the "highly satisfied," differences in each aspect of subsequent labor market experience between the two groups may be estimated by multiplying the particular regression coefficient by 3.

The data in Table 2.1 provide convincing evidence that job dissatisfaction is strongly related to subsequent turnover and labor market experience. For each of the eight age-sex-race groups, the relationship between job dissatisfaction and turnover is unmistakable, since each relationship is large in magnitude and statistically significant at the 5-percent level or better (one tail). The data also suggest that job dissatisfaction imposes costs on workers in terms of increased unemployment, decreased labor force participation, and decreased growth in annual earnings. There is no evidence, however, that dissatisfaction causes workers to relocate or to acquire additional skills in order to attain more satisfying jobs. Nor is there much evidence that job dissatisfaction leads to below average advancement in occupational attainment or hourly earnings. Some evidence exists, however, which indicates that dissatisfied black women subsequently advanced *more* in hourly earnings and occupational status than their more highly satisfied counterparts, perhaps as a result of their greater tendency to change employers. There is also evidence, perhaps for the same reason, that young and middle-aged black men who were dissatisfied with their job subsequently advanced more in occupational status.

Among middle-aged men where one would expect the greatest degree of worker stability, those highly dissatisfied with their jobs were from 14-20 percent more likely than comparable men who were highly satisfied to subsequently make

TABLE 2.1

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION ON SELECTED ASPECTS OF WORK EXPERIENCE BY AGE, SEX, AND RACE[a]

(t-ratios)

Aspect of work experience	Men		Boys		Women		Girls	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Change of employer[b]	4.72 (4.01)***	6.79 (3.67)***	11.31 (4.96)***	6.16 (1.76)*	4.76 (4.34)***	6.25 (2.13)**	10.55 (4.01)***	14.09 (3.27)***
Change in occupational status	-0.61 (-1.32)	1.02 (1.64)*	0.19 (0.22)	1.73 (1.66)*	-0.36 (-0.57)	1.87 (3.02)***	-0.78 (-1.00)	4.53 (3.40)***
Change in hourly earnings	-0.04 (-0.84)	-0.04 (-0.73)	-0.11 (-2.29)**	-0.01 (-0.24)	-0.55 (-1.10)	0.09 (1.69)*	-0.03 (-0.99)	0.09 (1.84)*
Change in annual earnings	-290 (-2.34)**	-270 (-2.19)**	-514 (-3.73)***	-285 (-1.65)*	-77 (-0.47)	107 (0.74)	-261 (-2.81)***	-187 (-1.46)
Weeks of unemployment	1.43 (3.84)**	1.80 (2.62)***	0.98 (2.56)**	-0.69 (-0.86)	2.17 (3.99)***	1.37 (2.13)**	0.64 (2.92)***	0.48 (0.83)
Susceptibility to unemployment[b]	4.96 (4.12)***	5.97 (2.92)***	11.18 (5.34)***	2.05 (0.56)	6.61 (3.26)***	6.22 (2.53)**	4.26 (2.17)**	4.11 (1.12)
Weeks of unemployment (for those with some unemployment)	1.86 (1.35)	1.65 (0.78)	0.30 (0.30)	-1.93 (-1.31)	3.50 (2.14)**	1.77 (0.98)	1.39 (2.00)**	0.56 (0.45)
Weeks out of the labor force	5.18 (5.00)***	1.39 (0.81)	1.44 (2.13)**	0.09 (0.08)	3.74 (1.91)*	1.11 (0.49)	2.39 (1.91)*	4.55 (2.39)**
Susceptibility to withdrawal from the labor force[b]	4.54 (2.95)***	5.28 (2.16)**	0.73 (0.31)	0.82 (0.22)	4.52 (1.88)*	2.16 (-0.77)	3.68 (1.71)*	3.16 (0.99)
Weeks out of the labor force (for those with some weeks)	8.16 (3.85)***	-0.74 (-0.24)	3.15 (2.53)**	-0.47 (-0.23)	3.38 (1.15)	3.60 (1.08)	1.54 (0.98)	4.34 (2.01)**
Received training[b]	-2.26 (-1.83)*	-0.10 (-0.07)	0.17 (0.09)	0.71 (0.31)	-0.64 (-0.30)	1.58 (0.65)	-1.21 (-0.61)	0.37 (0.11)
Geographic mobility[b]	0.32 (0.38)	0.05 (0.07)	-1.92 (-1.15)	2.22 (1.07)	1.85 (1.29)	-1.46 (-1.07)	-1.57 (-0.80)	1.33 (0.50)
Number of sample cases[c]	2,520	1,061	1,199	490	944	433	900	318

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage or salary workers employed full-time at the first survey date. In addition, for cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

a change of employer, regardless of their years of service with their employers. Overall, among the eight demographic groups, differences in the likelihood of a subsequent job change between highly dissatisfied and highly satisfied workers range in magnitude from a 14 percentage point differential among white middle-aged men to a 42 percentage point difference among the younger black women.

Perhaps because of differences in opportunities for attaining more satisfying jobs, the data also suggest that dissatisfaction generally is more likely to lead to turnover among younger than older workers.[18] Furthermore, with the exception of the younger cohort of men, it also appears that job dissatisfaction is more likely to lead to turnover among blacks than whites. In only one case, however, does a substantial difference between men and women exist. Dissatisfaction in that instance appears to cause the probability of a job change to be twice as great among young black women as young black men.

Perhaps as a result of their greater propensity to change employers, and/or perhaps due to a greater tendency to quit a job before lining up a new one, there is considerable evidence that dissatisfied workers are more prone to unemployment. Within both cohorts of white women the dissatisfied also appeared to have longer spells of unemployment, more spells, or both.[19] The data also demonstrate significant positive relationships between job dissatisfaction and withdrawal from the work force, especially among the older white men, the older white women, and the younger black women. Highly dissatisfied workers in each of these three subgroups are estimated to have subsequently been out of the work force 3 to 4 months longer than comparable workers who were "highly satisfied" with their jobs at the beginning of the period. The nearly 14 week reduction in labor force participation associated with job dissatisfaction among the younger women is particularly noteworthy since it occurred during a period of only 2 years duration, from 1968 to 1970.

The evidence concerning the costs of job dissatisfaction in terms of subsequent earnings and occupational advancement suggests the presence of complex patterns and offsetting forces. There is no evidence that the dissatisfied were less inclined to advance occupationally. In only one case, that of the younger white men, the dissatisfied subsequently advanced less in wage rates.

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[18] It should be recalled that the length of time after the measurement of job satisfaction during which turnover could have occurred is 2 years longer for the older cohorts of men and women than for their younger counterparts (see footnote 3). It is therefore likely that age differences in the relationship between job satisfaction and turnover are understated considerably in these data.

[19] The regressions (Table 2.1: Weeks of unemployment [for those with some unemployment]) compare satisfied and dissatisfied workers who have encountered at least one spell of unemployment. It is therefore possible that differences between the satisfied and dissatisfied may reflect differences in the number of spells of unemployment, differences in the duration of an average spell, or both.

Among blacks within each of the four cohorts, the dissatisfied were more likely to advance occupationally. In addition, black women who were dissatisfied with their jobs subsequently advanced more in hourly wage rates as well. These gains, which may have resulted from the greater incidence of turnover among dissatisfied workers, were apparently offset by other factors, such as greater unemployment and reduced labor force participation, since there is no evidence that the dissatisfied advanced more in annual earnings.

Among each of the four groups of men and among the younger white women, where no disproportionate gains in hourly earnings by the dissatisfied were observed, annual earnings of the highly satisfied are estimated to have outdistanced those of the highly dissatisfied by from $782 to $1542 over the subsequent period. Job dissatisfaction thus appears to impose considerable costs in terms of subsequent growth in annual earnings on workers within seven of the eight subgroups. With the single exception of the older white women, there is either a substantial disparity in growth in annual earnings observed or gains in hourly earnings and occupational status entirely offset by other factors.

IV. DIFFERENCES RESULTING FROM TURNOVER

In the preceding section it was impossible to ascertain unambiguously the extent to which the differences observed between satisfied and dissatisfied workers in unemployment, labor force participation, and advancement in earnings and occupational status resulted from a greater incidence of turnover among the dissatisfied. While workers who change jobs may incur more unemployment and weeks out of the labor force than those who do not, dissatisfied workers also may incur more of each than the average job changer. To attribute all of the costs of dissatisfaction to turnover would therefore overstate the costs, and understate the net advantages, of job changing. Moreover, there is considerable evidence that interfirm mobility often results in occupational advancement, as well as in increases in earnings and job satisfaction.[20] It is possible that the disadvantage of dissatisfied workers in growth in annual earnings did not stem from their greater mobility. Rather, the disadvantage may have been even larger had the dissatisfied not taken action and shifted jobs.

To assess the extent to which the differences between satisfied and dissatisfied workers result from a greater incidence of turnover among the dissatisfied, the regression analyses presented in Table 2.1 were modified to control for whether or not respondents made a change of employer during the period. The modified regression model therefore appears in mathematical terms as follows:

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[20] Longitudinal evidence of this may be found in: Kohen (1975, pp. 115-151); Leigh (1976); Parnes and Nestel (1975, pp. 103-113); and Parnes and Nestel (1976, pp. 174-180).

$$LME_{ij} = b_{ij0} + b_{ij1}JD + b_{ij2}T + \sum_{k=3}^{13} b_{ijk}X_k + \mu_{ij}$$

where T = 1 if a change of employer occurred and 0 otherwise; b_{ij2} = the regression coefficient for the turnover variable; X_k = the kth control variable for individual differences in skills, abilities, and demographic characteristics defined earlier; b_{ijk} = the regression coefficient for the kth control variable; and all other terms are as previously defined. Since information concerning changes of employer is available only for those respondents employed at both the beginning and the end of the period, the sample in all cases is restricted to those respondents employed at both survey dates.

The results of the regression analyses are presented in Table 2.2 and refer to the relationships between job dissatisfaction and aspects of subsequent labor market experience that do not stem from the greater incidence of turnover among the dissatisfied. Insight into the costs of job dissatisfaction that result from the greater incidence of turnover among the dissatisfied is provided by a comparison of the findings in Table 2.2 with those in Table 2.1. Since the regressions reported in these tables differ only in that the effects of turnover are present in the former and absent in the latter, the differences in the effects of job dissatisfaction between the two tables must therefore reflect the costs (benefits) of turnover that accrue disproportionately to the dissatisfied.

The findings suggest that much of the differences in subsequent unemployment between comparable satisfied and dissatisfied workers reported in Table 2.1, particularly among women, reflect the greater incidence of turnover among the dissatisfied. There is also evidence that dissatisfied workers incurred more unemployment for other reasons as well. Especially among men, the data suggest that dissatisfied workers generally encountered more weeks of unemployment than the average mover, the average stayer, or both. They may, for example, be more inclined to quit a job without arranging for a new one beforehand, or to suffer a temporary layoff while remaining with their regular employer.

With respect to the differences between satisfied and dissatisfied workers in subsequent labor force participation, the findings in Table 2.2 are not as unambiguous as they appear. On the surface the data suggest that virtually all of the differences between comparable satisfied and dissatisfied workers in subsequent labor force participation observed in Table 2.1 reflect the greater incidence of turnover among the dissatisfied. The unavoidable restriction of the sample in Table 2.2 to only those employed at both the beginning and the end of the period, however, may have excluded those persons whose labor force participation had been reduced the most by job dissatisfaction--those who had withdrawn from the work force at the end of the period.

The differences in advancement in hourly earnings, annual earnings, and occupational status observed in Table 2.1 also appear to have been influenced appreciably by the greater incidence of turnover among the dissatisfied. The

TABLE 2.2

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION ON SELECTED ASPECTS OF WORK EXPERIENCE CONTROLLING FOR TURNOVER BEHAVIOR: BY AGE, SEX, AND RACE[a]

(t-ratios)

Aspect of work experience	Men		Boys		Women		Girls	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Change in occupational status	-0.30 (-0.63)	1.18 (1.79)*	-1.31 (-1.53)	0.38 (0.34)	-0.46 (-0.72)	1.78 (2.85)***	-1.44 (-1.97)**	2.43 (1.83)*
Change in hourly earnings	-0.01 (-0.20)	-0.01 (-0.09)	-0.08 (-1.51)	-0.01 (-0.14)	-0.04 (-0.73)	0.09 (1.00)	-0.03 (-0.83)	0.11 (2.16)**
Change in annual earnings	-219 (-1.69)*	-199 (-1.54)	-295 (-1.98)**	-190 (-1.05)	130 (0.70)	300 (2.51)**	-98 (-1.04)	35 (0.23)
Weeks of unemployment	1.08 (3.20)***	1.16 (2.15)**	0.96 (3.29)***	-0.43 (-0.59)	0.71 (1.42)	0.87 (1.38)	0.36 (1.51)	0.79 (1.08)
Susceptibility to unemployment[b]	3.81 (3.43)***	0.92 (0.48)	8.09 (3.80)***	-1.44 (-0.38)	5.38 (2.46)***	1.55 (0.59)	0.81 (0.37)	6.35 (1.45)
Weeks of unemployment (for those with some unemployment)	1.97 (1.31)	3.89 (1.95)*	1.32 (1.72)*	-0.80 (-0.56)	0.33 (0.21)	2.52 (1.30)	1.29 (1.62)	1.95 (1.30)
Weeks out of the labor force	0.73 (1.76)*	1.05 (1.39)	0.63 (1.33)	0.18 (0.18)	0.36 (0.31)	-0.54 (-0.44)	-0.02 (-0.02)	2.11 (1.22)
Susceptibility to withdrawal from the labor force[b]	2.01 (1.25)	3.53 (1.34)	-2.11 (-0.85)	0.78 (0.19)	2.32 (0.84)	-3.80 (-1.15)	0.25 (0.09)	-4.12 (-0.94)
Weeks out of the labor force (for those with some weeks)	1.39 (1.35)	-0.03 (-0.02)	-1.88 (-2.04)**	0.31 (0.17)	0.71 (0.35)	1.16 (0.57)	-0.04 (-0.03)	3.44 (1.62)
Received training[b]	-2.21 (-1.60)	0.49 (0.29)	0.72 (0.31)	4.36 (1.38)	-2.08 (-0.83)	2.50 (0.89)	-3.12 (-1.19)	-0.37 (-0.08)
Geographic mobility[b]	-0.17 (-0.20)	-0.67 (-0.84)	-4.80 (-2.33)**	3.22 (1.11)	-0.18 (-0.12)	-2.57 (-1.74)*	-4.45 (-2.14)**	0.24 (0.08)
Number of sample cases[c]	1,837	732	784	315	968	517	610	199

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, rural versus urban residence, and turnover behavior.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

evidence in Table 2.2 suggests that a substantial portion of the annual earnings disadvantage of the dissatisfied stemmed from their greater mobility. Among each of the eight subgroups the evidence consistently suggests that when the greater incidence of turnover among the dissatisfied is statistically controlled for, estimates of their annual earnings disadvantage change considerably.[21]

The data in Table 2.2 also suggest that the older black women who were dissatisfied with their jobs at the beginning of the period actually outdistanced their more highly satisfied counterparts in subsequent growth in annual earnings. Apparently, the greater likelihood of their changing employers, coupled with the costs of mobility, masked this relationship in Table 2.1. In only one other instance have the greater costs of mobility incurred by dissatisfied workers resulted in less successful labor market experience. Among the dissatisfied young white men, some of their disadvantage in subsequent growth in hourly earnings observed in Table 2.1 is attributable to their greater mobility.

The data in Table 2.2 also provide evidence of a number of disparities in subsequent advancement in occupational status, hourly earnings, and in annual earnings that evidently occur whether or not workers made a change of employer. Furthermore, there are two cases in which the data suggest that the greater mobility of dissatisfied workers has led to greater occupational advancement than experienced by comparable workers more highly satisfied with their jobs. Among young black men, virtually all of the above-average occupational advancement of the dissatisfied observed in Table 2.1 is linked to their greater incidence of turnover, and nearly half of the greater degree of advancement among dissatisfied young black women apparently stems from their greater mobility.

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[21] Even among the white women and the black girls, where differentials between satisfied and dissatisfied workers are not statistically significant in either table, the estimates suggest that the greater incidence of turnover among the highly dissatisfied resulted in more than a $600 disadvantage in subsequent growth in annual earnings relative to comparable workers who were highly satisfied. Although it is almost always of questionable wisdom to generalize from statistically insignificant relationships, the consistency of these relationships to the pattern observed among the other six subgroups is noteworthy. Additionally, the high degree of multicollinearity in the regressions on growth in annual earnings that is inevitable--since annual earnings at the beginning of the period, job satisfaction, turnover, and the control variables in the regressions are highly correlated and since all are included as explanatory variables in the same equations--doubtless renders conservative the tests of statistical significance reported. This results from the fact that multicollinearity biases upward the standard errors of the regression coefficients and thereby biases downward the t-ratios observed. Further discussion of this effect may be found in Farrar and Glauber (1967).

In a third case, the greater mobility of dissatisfied white girls improves their relative position in the labor market, but the gains are apparently offset by the slower rates of occupational advancement experienced by dissatisfied white girls who were immobile.[22] There are no cases, however, in which the data show that the greater turnover of the dissatisfied has led to above-average advancement in their wage rates or annual earnings.[23]

Within five of the eight subgroups, differentials in subsequent advancement between comparable satisfied and dissatisfied workers are to some degree independent of whether a change of employer was made during the period. The data in Table 2.2 suggest that the greater occupational and hourly earnings advancement of dissatisfied black women is not appreciably linked to their greater turnover rates, nor is the above-average occupational advancement of dissatisfied middle-aged black men or the below-average advancement in annual earnings of dissatisfied young and middle-aged white men. These disparities are evidently linked to differentials in subsequent labor market experience among movers, among stayers, or among both.

Finally, the data in Table 2.2 suggest that the lack of differentials in rates of geographic movement between comparable satisfied and dissatisfied workers observed in Table 2.1 stems from the greater turnover of dissatisfied workers. Table 2.2 shows that if satisfied workers changed employers at the same rate as comparable dissatisfied workers, the satisfied would be more likely to relocate. While job changers are more likely to relocate than stayers, and while the dissatisfied are more prone to change employers, the dissatisfied are apparently below-average among movers and/or among stayers in geographical mobility.

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[22] Because of greater mobility among the dissatisfied, Table 2.1 showed no differences between comparable satisfied and dissatisfied white girls in occupational advancement. When the greater incidence of turnover among the dissatisfied is controlled for in Table 2.2, however, the results suggest that the dissatisfied experienced less occupational advancement than their more highly satisfied counterparts. Thus, had the dissatisfied not been so prone to turnover, they would have experienced less occupational advancement than those young women more highly satisfied with their jobs.

[23] Although the relationship between job dissatisfaction and change in hourly earnings among older black women is not statistically significant in Table 2.2, a comparison with Table 2.1 reveals that the relationship has not changed due to the inclusion of a control variable for turnover behavior in the analysis. Rather, the standard error has been increased and thus the t-ratio reduced. The increase in the standard error of the estimate is to be expected because of the increased multicollinearity introduced by the intercorrelation between the job satisfaction and turnover variables. While multicollinearity will raise the standard error of the estimate, it will not bias the regression coefficient. For further discussion of the statistical difficulties of multicollinearity and their influence on the standard error and regression coefficients, see Farrar and Glauber (1967).

V. DIFFERENCES AMONG MOVERS AND STAYERS

Further insights into the differences in subsequent labor market experience between comparable satisfied and dissatisfied workers uncovered in Table 2.2 that did not stem from the greater mobility of the dissatisfied may be obtained by separate analysis of those who made a change of employer during the period and those who did not. Differences between comparable satisfied and dissatisfied workers who did not change employers tell something of the costs of dissatisfaction that are incurred by workers when they fail to be mobile. These differences thus make it possible to shed light on the job dissatisfaction or "quality of working lives" controversy, for disparities should be observed in subsequent labor market experience if job dissatisfaction among stayers reduces productivity as has been so vocally speculated.

In addition, differences between comparable satisfied and dissatisfied workers who changed employers sheds light on whether the dissatisfied incur either above-average costs or benefits of mobility when they change jobs. To the extent that changes of employer are less carefully planned among dissatisfied movers, for example, whose dissatisfaction may make them less reluctant to quit a job without arranging for a new one beforehand, the dissatisfied may incur more unemployment than the average mover.

However, there are at least two possible reasons to expect relatively greater advancement among dissatisfied job changers. The first is that the dissatisfied changed jobs earlier in the subsequent period than workers more highly satisfied with their jobs at the beginning of the period. Other things being equal, there would be a longer "payback period" for the dissatisfied over which the returns to mobility might accrue. The second possible reason is that dissatisfaction is a function of disequilibrium,[24] in which case dissatisfied workers would be farther at the beginning of the period from their equilibrium occupation and wage than comparable workers who were more highly satisfied. In this instance, the dissatisfied would be the most likely job changers to profit from interfirm mobility.

Separate analysis of differences between comparable satisfied and dissatisfied workers among movers and stayers is also of interest since such analyses may uncover differences that were not apparent in Table 2.2. To the extent that differentials were not the same among those who changed employers and among those who did not, they could possibly have been offsetting. If dissatisfied workers were above-average among movers in acquiring formal occupational training, for example, while below-average among stayers, these offsetting differentials may not have been apparent in either Table 2.1 or Table 2.2.

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[24] See Hamermesh (1975) for a discussion of this point of view.

To examine differentials among movers and stayers, the regression analyses presented in Table 2.2 were modified to include a term capturing the interaction between job dissatisfaction and turnover (JD x T). The regression equation is now specified as follows:

$$LME_{ij} = b_{ij0} + b_{ij1}JD + b_{ij2}T + b_{ij3}(JD \times T) + \sum_{k=4}^{14} b_{ijk}X_k + \mu_{ij}$$

where JD x T = the cross-product of the job dissatisfaction and turnover variables; b_{ij3} = the regression coefficient for the interaction term; and all other terms are as previously defined.

To calculate the relationship between job dissatisfaction and the ith aspect of subsequent labor market experience, for the jth age-sex-race group, the equation may be partialled as follows:

$$\frac{\partial LME_{ij}}{\partial JD} = b_{ij1} + b_{ij3}T$$

The relationship between dissatisfaction and the ith dimension of labor market experience among workers who changed employers would therefore be:

$$\frac{\partial LME_{ij}}{\partial JD} = b_{ij1} + b_{ij3}$$

since T = 1 among those who have changed jobs.[25] Likewise, the relationship

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[25] The standard error of the partial may be calculated by the formula for the standard error of the sum of two random variables:

$$S_{\frac{\partial LME_{ij}}{\partial JD}} = \sqrt{S^2_{b_{ij1}} + S^2_{b_{ij3}} + 2\,\mathrm{cov}_{b_{ij1}} \cdot b_{ij3}}$$

which is the square root of the sum of the variance of the regression coefficient for the job dissatisfaction term (b_{ij1}), plus the variance of the regression coefficient for the interaction term between dissatisfaction and turnover (b_{ij3}), plus 2 times the covariance between the two regression coefficients. The test between dissatisfaction and the ith aspect of labor market experience among workers who remained with the same employer would be:

$$\frac{\partial LME_{ij}}{\partial JD} = b_{ij1}$$

since T = 0 among those who made no job change.

The results of the regressions are presented by cohort in Tables 2.3 through 2.6. Within each of the eight groups there is evidence that the dissatisfied were atypical job changers. Among white workers within three of the four cohorts, there is also evidence that dissatisfied workers were atypical when they did not change employers.

Perhaps the most important finding to emerge from this analysis is that among workers who remained with the same employer for the entire period, there is evidence of the economic costs of job dissatisfaction. While the costs of dissatisfaction among stayers are appreciable within only three of the eight groups, young and middle-aged white men and young white women, the particular groups affected constitute the vast majority of the population represented by the four NLS cohorts. Indeed, these particular groups comprised more than one-third of the total U.S. civilian labor force in 1975.[26]

Among workers who did not change employers, the data suggest that white men and young white women who were highly dissatisfied with their jobs lagged behind comparable workers who were highly satisfied by from $1,000 to $1,400 in subsequent growth in earnings.[27] Within each of these three subgroups the findings also show that the dissatisfied were less likely to advance occupationally than comparable workers more highly satisfied with their jobs at the beginning of the period. These findings are particularly significant among the young, where highly dissatisfied youth, both male and female, are estimated to have advanced 6 to 9 points less on the Duncan (1961) Index of occupational

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of statistical significance, the t-ratio, is then calculated by dividing the partial by its standard error:

$$t = \frac{b_{ij1} + b_{ij3}}{\sqrt{S^2_{b_{ij1}} + S^2_{b_{ij3}} + 2\,\mathrm{cov}_{b_{ij1} \cdot b_{ij3}}}}$$

[26] Employment and Training Report of the President (1976), Table A-3, pp. 215-216.

[27] The findings concerning growth in earnings are all the more remarkable in the cases of the younger cohorts, since the period under study is only 2 to 3 years in length (see footnote 3).

TABLE 2.3

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MIDDLE-AGED MEN IN WORK EXPERIENCE:
BY RACE AND COMPARATIVE JOB STATUS, 1966-1971[a]

(t-ratios)

Aspect of 1966-1971 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	0.50 (0.49)	-0.94 (-1.64)*	2.33 (1.75)*	0.74 (0.90)
Change in hourly earnings	0.33 (2.86)***	-0.07 (-1.28)	0.03 (0.24)	-0.04 (-0.56)
Change in annual earnings	15 (0.05)	-333 (-2.16)**	-118 (-0.45)	-248 (-1.51)
Weeks of unemployment	3.43 (4.90)***	0.22 (0.53)	2.13 (1.99)**	-0.14 (-0.21)
Susceptibility to unemployment[b]	5.25 (2.27)**	2.96 (2.20)**	-1.67 (-0.43)	-0.33 (-0.14)
Weeks of unemployment (for those with some unemployment	5.65 (2.51)**	-1.42 (-0.48)	4.18 (1.52)	1.42 (0.27)
Weeks out of labor force	1.77 (2.03)**	0.39 (0.77)	-0.05 (-0.03)	0.55 (0.58)
Susceptibility to withdrawal from labor force[b]	3.37 (1.00)	1.82 (0.93)	3.24 (0.62)	1.18 (0.36)
Weeks out of labor force (for those with some weeks)	2.10 (1.09)	0.87 (0.64)	-3.17 (-1.18)	1.09 (0.50)
Received training[b]	-1.80 (-0.62)	-2.18 (-1.29)	3.69 (1.09)	-1.54 (-0.72)
Geographic mobility[b]	-3.74 (-2.21)**	1.13 (1.14)	-0.77 (-0.30)	-0.49 (-0.48)
Number of sample cases[c]	287	1,540	122	610

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2.4

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG MEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1966-1969[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-0.38 (-0.36)	-3.03 (-2.11)**	0.54 (0.41)	-0.01 (-0.00)
Change in hourly earnings	-0.06 (-0.90)	-0.10 (-1.11)	0.06 (0.80)	-0.13 (-1.23)
Change in annual earnings	-197 (-1.03)	-468 (-1.88)*	-35 (-0.15)	-411 (-1.35)
Weeks of unemployment	1.04 (2.91)***	0.75 (1.56)	-1.35 (-1.51)	0.83 (0.60)
Susceptibility to unemployment[b]	8.82 (3.33)***	6.75 (1.90)*	-2.30 (-0.50)	0.42 (0.06)
Weeks of unemployment (for those with some unemployment)	0.99 (1.19)	3.03 (1.48)	-2.28 (-1.43)	7.58 (1.14)
Weeks out of the labor force	0.33 (0.61)	0.59 (0.81)	-0.37 (-0.31)	1.57 (0.84)
Susceptibility to withdrawal from the labor force[b]	-3.67 (-0.85)	-1.07 (-0.25)	-6.00 (-1.23)	16.90 (2.24)**
Weeks out of the labor force (for those with some weeks)	1.23 (1.27)	2.04 (1.15)	-0.61 (-0.27)	-0.28 (-0.09)
Received training[b]	2.91 (1.00)	-4.23 (-1.03)	8.85 (2.35)**	-7.41 (-1.16)
Geographic mobility[b]	-6.11 (-2.42)**	-3.21 (-0.90)	3.41 (1.01)	-2.81 (-0.49)
Number of sample cases[c]	530	344	227	88

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[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer. health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2.5

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MATURE WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1967-1971[a]

(t-ratios)

Aspect of 1967-1971 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	3.11 (3.57)***	-1.40 (-1.47)	2.52 (3.04)***	0.81 (0.85)
Change in hourly earnings	0.00 (0.04)	-0.08 (-1.52)	0.12 (1.58)	0.05 (0.66)
Change in annual earnings	42 (0.17)	240 (0.87)	402 (2.47)**	177 (0.99)
Weeks of unemployment	1.47 (2.16)**	-0.15 (-0.20)	1.53 (1.82)*	0.04 (0.05)
Susceptibility to unemployment[b]	6.09 (2.03)**	4.57 (1.44)	0.07 (0.02)	3.37 (0.86)
Weeks of unemployment (for those with some unemployment)	2.68 (1.47)	-5.59 (-1.90)*	3.86 (1.75)*	-2.26 (-0.53)
Weeks out of labor force	-0.39 (-0.24)	1.20 (0.71)	-1.64 (-1.00)	0.81 (0.45)
Susceptibility to withdrawal from the labor force[b]	-0.99 (-0.26)	6.02 (1.52)	-7.38 (-1.65)*	0.59 (0.12)
Weeks out of the labor force (for those with some weeks)	-0.28 (-0.10)	1.99 (0.65)	0.25 (0.09)	2.18 (0.73)
Received training[b]	-1.45 (-0.43)	-2.85 (-0.77)	5.68 (1.51)	-1.69 (-0.39)
Geographic mobility[b]	-0.44 (-0.22)	0.12 (0.05)	-3.70 (-1.88)*	-1.10 (-0.49)
Number of sample cases[c]	335	583	204	513

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2.6

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1968-1970[a]

(t-ratios)

Aspect of 1968-1970 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-1.13 (-1.19)	-1.87 (-1.65)*	3.33 (2.22)**	-0.49 (-0.18)
Change in hourly earnings	-0.01 (-0.16)	-0.06 (-1.10)	0.14 (2.30)**	0.04 (0.32)
Change in annual earnings	82 (0.66)	-336 (-2.30)**	113 (0.67)	-232 (-0.74)
Weeks of unemployment	0.63 (2.04)*	-0.02 (-0.05)	0.80 (0.96)	0.74 (0.49)
Susceptibility to unemployment[b]	0.23 (0.08)	0.81 (0.24)	6.45 (1.29)	5.97 (0.66)
Weeks of unemployment (for those with some unemployment)	1.59 (1.90)	-1.00 (-0.34)	1.97 (1.27)	1.58 (0.23)
Weeks out of the labor force	-1.36 (-1.19)	1.36 (1.03)	3.71 (1.90)*	-3.14 (-0.89)
Susceptibility to withdrawal from the labor force[b]	-5.57 (-1.59)	7.92 (1.95)*	-1.53 (-0.31)	-12.62 (-1.40)
Weeks out of the labor force (for those with some weeks)	-0.77 (-0.48)	0.44 (0.20)	4.17 (1.83)*	-1.11 (-0.20)
Received training[b]	-1.44 (-0.42)	-6.11 (-1.50)	-0.23 (-0.05)	-0.69 (-0.07)
Geographic mobility[b]	-6.78 (-2.47)**	-0.94 (-0.29)	-0.58 (-0.16)	2.96 (0.46)
Number of sample cases[c]	272	338	127	72

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

status over the next 2 to 3 years than comparable youth who were highly satisfied with their jobs. The data provide no evidence, however, that dissatisfied stayers subsequently encountered more weeks of unemployment or more weeks out of the labor force than their more highly satisfied counterparts; nor do they show that the dissatisfied were less likely to subsequently acquire skills training.

These findings are particularly important since there is no evidence among those who changed employers that the dissatisfied subsequently advanced less in occupation or earnings. Among those who changed employers there is considerable evidence that the dissatisfied were more likely than average to advance subsequently in occupation and/or earnings, especially among the older cohorts. Among blacks who changed jobs, with the single exception of the young black men, and among the older white women, the highly dissatisfied subsequently advanced from 7 to 10 points more on the Duncan (1961) Index of occupational status than their highly satisfied counterparts. In addition, older white men who were highly dissatisfied with their jobs in 1966 are estimated to have advanced by $1.00 per hour more in wage rates between 1966 and 1971 than their highly satisfied counterparts who also changed employers during the same period. And older black women who were highly dissatisfied are estimated to have advanced by about $1200 more than comparable women who were highly satisfied with their jobs at the beginning of the period. Consistent with the data in Table 2.2, the costs of job dissatisfaction apparently do not stem entirely from the greater turnover of the dissatisfied. Indeed, they may also stem from job dissatisfaction that does not lead to turnover.

There is considerable evidence, however, that dissatisfied workers who changed employers were more likely than the average job changer to encounter unemployment.[28] With the exception of young blacks, this suggests that the dissatisfied engaged in longer search, due perhaps to a greater tendency to quit a job without lining up a new one beforehand. Furthermore, among the older men and younger women, there is evidence that the dissatisfied were above average among job changers in weeks out of the labor force, although within neither cohort do the results apply equally to whites and blacks. Also, within each of the four cohorts, but generally only among whites, the data show that the dissatisfied were less likely than the typical mover to relocate in conjunction with their job change. Only in the case of young black men, do the data suggest any differences between satisfied and dissatisfied workers in propensity to receive formal occupational training. Dissatisfied young black men were above average in tendency to acquire training.

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[28] Among the younger black women the relationship between dissatisfaction and unemployment among job changers also is large enough to be meaningful, but fails to achieve conventional levels for statistical significance because of the relatively small sample size and the inevitably high degree of interdependence among explanatory variables in the regression. Multicollinearity is inevitably high because of the strong interrelationships among the job dissatisfaction (JD), turnover (T), and interaction terms (JD x T) in the regression equation. Further discussion of multicollinearity may be found in Farrar and Glauber (1967).

VI. DIFFERENCES RESULTING FROM LOW WAGES AND OCCUPATIONAL STATUS

Labor market imperfections result in workers not being in the jobs for which they are best suited. Job dissatisfaction resulting from these imperfections may account for differences in subsequent turnover and other aspects of labor market experience previously observed. Among those who changed jobs, as well as among those who did not, differences in subsequent labor market experience between satisfied and dissatisfied workers may result from a disproportionate relegation of the dissatisfied to inferior jobs prior to the beginning of the period.

The data in Table 2.7 provide some insight into the relationship between job dissatisfaction and labor market imperfections. The regression results presented show for each of the age-sex-race groups the relationship between job dissatisfaction and each of three aspects of labor market attainment at the beginning of the period: (1) average hourly earnings in dollars, (2) annual earnings in dollars, and (3) occupational status in terms of scores on the Duncan (1961) Index. In each case, the relationships are "net" of individual differences in each of the control variables statistically held constant in Tables 2.1-2.6. The data in Table 2.7 therefore show whether dissatisfied workers were in lower paying and lower status jobs at the beginning of the period than comparable workers more highly satisfied with their jobs.

For each of the eight groups, there is considerable evidence that job dissatisfaction results from real disparities in earnings and status among comparable workers. Among the older white men, for example, the highly dissatisfied are estimated to have earned about $.69 per hour and about $2,352 per year less than comparable workers who were highly satisfied with their jobs, and to have been in jobs about 11 points lower in status as well.

Although it is clearly possible for equal workers to have unequal earnings and status in equilibrium, due to differences in nonpecuniary aspects of jobs, it is unlikely that workers who have traded off earnings or status for nonwage aspects would be any less satisfied with their jobs. The relationships observed in Table 2.7 between dissatisfaction and earnings, and dissatisfaction and status, may therefore be thought to reflect labor market imperfections that obstruct the labor market mechanism in its efforts to efficiently allocate human resources and maximize worker satisfaction.

Further support for this contention may be found in Table 2.8. If dissatisfied workers were less concerned about economic factors than their more highly satisfied counterparts, this would be reflected in their responses to questions probing their preferences and "tastes." The dissatisfied should also be less inclined than the more highly satisfied to mention economic factors when asked to name the aspects of their initial survey date jobs that they

TABLE 2.7

REGRESSION RESULTS--NET RELATIONSHIPS BETWEEN JOB DISSATISFACTION AND EARNINGS, AND DISSATISFACTION AND OCCUPATIONAL STATUS AT THE BEGINNING OF THE PERIOD BY AGE, SEX, AND RACE[a]

(t-ratios)

Aspect of work experience	Men		Boys		Women		Girls	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Average hourly earnings	-0.23 (-5.51)**	-0.12 (-3.28)**	-0.08 (-2.20)*	-0.04 (-1.04)	-0.05 (-1.04)	-0.10 (-1.99)*	-0.05 (-2.05)*	-0.11 (-2.72)**
Annual earnings	-784 (-6.46)**	-278 (-3.38)**	-148 (-1.82)*	35 (.40)	-223 (-2.40)**	-197 (-1.86)*	-161 (-2.65)**	0 (0.00)
Occupational status	-3.67 (-6.83)**	-2.53 (-4.59)**	-3.79 (-5.42)**	-4.21 (-6.12)**	-3.33 (-3.45)**	-1.42 (-1.25)	-2.51 (-3.53)**	-5.36 (-4.80)**
Number of sample cases[b]	2,520	1,061	1,199	490	944	433	900	318

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[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] The number of sample cases reported refer to wage or salary workers employed full-time at the first survey date. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school.

*p < .05; **p < .01 (one-tailed tests).

TABLE 2.8

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED WORKERS IN PREFERENCES FOR ECONOMIC REWARDS: BY AGE, SEX, AND RACE

Demographic subgroup:	Good wages more important than liking the work		Earnings and fringes the aspects of their jobs disliked most	
	Highly satisfied	Not highly satisfied	Highly satisfied	Not highly satisfied
White men	14.4	25.4	8.1	10.3
Black men	43.3	56.7	10.5	22.4
White boys	15.4	21.7	11.0	13.8
Black boys	48.3	48.8	15.9	21.4
White women	6.8	13.4	5.6	8.9
Black women	19.3	37.0	10.6	19.3
White girls	9.6	19.5	8.2	8.3
Black girls	34.0	35.2	8.5	14.9

disliked the most. For each of the eight subgroups, Table 2.8 provides a comparison of highly satisfied and less than highly satisfied workers in terms of their tendencies to report at the initial survey date that "good wages" are more important in any job than "liking the work," and that "earnings and fringes" are the aspects of their jobs that they disliked most.[29] These data suggest that dissatisfied workers were no less interested in economic rewards at the beginning of the period than their more highly satisfied counterparts. There is also little evidence that either group was solely motivated by economic considerations.

To the contrary, it appears that while no less concerned about economic rewards, the dissatisfied nonetheless experienced substantial disparities in earnings and occupations relative to comparable satisfied workers at the beginning of the period (Table 2.7), and subsequently encountered considerable costs in job changing as well. Furthermore, among whites within three of the four cohorts, the dissatisfied also encountered considerable costs when they did not make a change of employer.

To examine the extent to which differences between satisfied and dissatisfied workers in subsequent turnover and labor market experience reflect the differences in earnings and occupations observed in Table 2.7, the regression model originally specified has been modified to control for differences in average hourly earnings and occupational status at the beginning of the period, as well as for the wide range of personal and demographic characteristics held constant in each of the previous analyses. By controlling for these variables it is possible to examine subsequent differences in turnover and labor market experience between comparable satisfied and dissatisfied workers who were equal initially in wage and occupational status. Since these differences should not reflect low wages or occupational status, they presumably could not be reduced by increasing the wages and status of dissatisfied workers to achieve parity with comparable satisfied workers. By a comparison of the findings with those reported in Table 2.1, it is also possible to shed light on the extent to which the differences between satisfied and dissatisfied workers observed in Table 2.1 reflect the disproportionate relegation of the dissatisfied to jobs that were inferior in wages and status at the beginning of the period.[30]

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[29] The data in Table 2.8 are in response to the following questions asked at the initial survey date of each of the four NLS cohorts: (1) "What would you say is the more important thing about any job--good wages or liking the kind of work you are doing?" and (2) "What are the things about your job that you don't like so well?"

[30] To facilitate the comparison of findings with those in Table 2.1, appendix tables present the results of this analysis immediately adjacent to those in Table 2.1 for each of the age-sex-race groups. The appendix tables also include a comparison with the results when the measure of occupational status is included in the analysis without the control variable for average hourly earnings.

The results of this analysis are presented in Table 2.9, and the modified regression equation now appears as follows:

$$LME_{ij} = b_{ij0} + b_{ij1}\ JD + b_{ij2}\ OCC + b_{ij3}\ AHE + \sum_{k=4}^{14} b_{ijk}X_{ijk} + \mu_{ij}$$

where OCC = occupational status as measured by the Duncan (1961) Index; b_{ij2} = the regression coefficient for the control variable for occupational status; AHE = average hourly earnings in dollars; b_{ij3} = the regression coefficient for the control variable for average hourly earnings; and all other terms are as previously defined.

The data in Table 2.9 leave little doubt that observed differences in growth in annual earnings, in occupational advancement, and in withdrawal from the work force have been particularly influenced by the initial wage and status disparities between comparable satisfied and dissatisfied workers. By no means, however, may all of the differences between satisfied and dissatisfied workers be linked to labor market imperfections which cause wage and occupational disparities among comparable workers. In particular, virtually all of the differences in subsequent turnover behavior[31] and unemployment, and differences within several of the subgroups in occupational advancement, growth in hourly and annual earnings, and in labor force participation, appear unrelated to the initial disparities in wage rates and occupational status.

Overall, the data in Tables 2.7, 2.8, and 2.9 thus lead to three conclusions. First, the tremendous disparities among comparable satisfied and dissatisfied workers in earnings and occupational attainment at the beginning of the period, coupled with the apparent effects of these disparities on subsequent labor market experience, suggest the need for public policy efforts to improve the allocative efficiency of labor markets by reducing labor market imperfections and institutional barriers to mobility. The reduction of disparities among comparable workers in the overall quality of employment situations is clearly warranted

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[31] Although differences between the satisfied and dissatisfied young black men in subsequent turnover are not statistically significant in Table 2.9, a comparison of the regression coefficients for the turnover variable in Tables 2.1 and 2.9 shows there is little difference. The failure of the relationship to achieve statistical significance in Table 2.9 results almost exclusively from an increase in the standard error, doubtless due to increased multicollinearity from the inclusion of occupational status and average hourly earnings as control variables in the analysis. Not only are these variables highly correlated, but each is also highly correlated with job dissatisfaction (Table 2.7), and the personal and demographic characteristics also included as control variables (see footnotes 23 and 28).

TABLE 2.9

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION ON SELECTED ASPECTS OF WORK EXPERIENCE CONTROLLING FOR OCCUPATION AND HOURLY EARNINGS: BY AGE, SEX, AND RACE[a]

(t-ratios)

Aspect of work experience	Men		Boys		Women		Girls	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Change of employer[b]	3.87 (3.09)***	6.32 (3.25)***	10.05 (4.27)***	5.85 (1.46)	12.24 (4.61)***	7.68 (2.38)**	9.00 (3.30)***	15.94 (3.22)***
Change in occupational status	-0.50 (-1.02)	0.88 (1.34)	-1.75 (-2.13)**	-0.39 (-0.38)	-0.38 (-0.58)	1.62 (2.40)**	-1.35 (-1.81)*	2.98 (2.04)**
Change in hourly earnings	-0.00 (-0.06)	-0.01 (-0.28)	-0.09 (-1.73)*	0.02 (0.42)	-0.03 (-0.61)	0.10 (1.84)*	-0.03 (-0.74)	0.12 (2.23)**
Change in annual earnings	-163.48 (-1.38)	-177.65 (-1.39)	-414.02 (-2.98)***	-118.37 (-0.66)	-104.24 (-0.91)	216.35 (1.27)	-159.44 (-1.70)*	20.54 (0.14)
Weeks of unemployment	1.08 (2.76)***	1.53 (2.17)**	0.79 (1.96)**	-0.84 (-0.95)	2.04 (3.72)***	1.69 (2.35)**	0.47 (2.01)**	0.36 (0.51)
Susceptibility to unemployment[b]	3.47 (2.72)****	5.57 (2.63)***	10.18 (4.73)***	4.62 (1.15)	6.34 (2.98)***	7.61 (2.73)***	3.60 (1.73)*	4.00 (0.90)
Weeks of unemployment (for those with some unemployment)	1.48 (1.00)	1.40 (0.61)	0.10 (0.09)	-2.63 (-1.59)	3.11 (1.98)**	2.24 (1.13)	0.83 (1.07)	0.55 (0.35)
Weeks out of the labor force	4.81 (4.40)***	1.33 (0.75)	1.44 (2.11)**	0.32 (0.25)	1.98 (0.99)	0.72 (0.31)	0.65 (0.50)	5.79 (2.59)***
Susceptibility to withdrawal from the labor force[b]	2.50 (1.54)	5.65 (2.18)**	0.04 (0.02)	2.03 (0.50)	3.14 (1.25)	-3.16 (-0.97)	2.55 (1.11)	5.35 (1.36)
Weeks out of the labor force (for those with some weeks)	8.96 (3.94)***	-0.65 (-0.20)	3.11 (2.47)**	-0.97 (-0.41)	1.92 (0.62)	3.85 (1.02)	-0.34 (-0.20)	4.68 (1.86)*
Received training[b]	-1.20 (-0.93)	0.07 (0.04)	0.94 (0.47)	2.21 (0.84)	0.54 (0.25)	2.07 (0.75)	-0.66 (-0.32)	6.41 (1.63)
Geographic mobility[b]	0.79 (0.90)	0.08 (0.11)	-1.52 (-0.86)	1.13 (0.52)	2.25 (1.52)	-0.82 (-0.59)	-2.61 (-1.27)	4.47 (1.41)
Number of sample cases[c]	2,520	1,061	1,199	490	944	433	900	318

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, rural versus urban residence, occupation, and hourly earnings.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage or salary workers employed full-time at the first survey date. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

in order to maximize job satisfaction and to minimize the social and economic costs of misallocated human resources.

Second, wage and status disparities among comparable workers at the beginning of the period do not account for all of the differences observed between satisfied and dissatisfied workers, suggesting that there may be disparities in other aspects of the quality of job situations as well. Disparities in fringe benefits, working conditions, opportunities for autonomy and the like may be precisely the salient nonwage, nonstatus factors which explain the unaccountable differences in turnover, advancement, unemployment, and labor force participation between satisfied and dissatisfied workers observed in Table 2.9. Which of these additional factors are salient cannot be unambiguously ascertained with the data in this study. Closer attention to disparities in nonwage, nonstatus aspects of employment among comparable workers clearly appears to be in order.

Third, the greater advancement of dissatisfied workers within several of the subgroups among those who changed employers (Tables 2.3-2.6) may not be accounted for entirely in terms of wage and status disparities between comparable satisfied and dissatisfied workers. The finding that mobility often works to the economic advantage of dissatisfied workers must therefore stem from factors other than the initial economic and occupational disadvantage of dissatisfied workers.

VII. CONCLUSIONS

The data in this chapter provide convincing evidence that job dissatisfaction is strongly related to subsequent turnover and labor market experience. For each of the eight age-sex-race groups the relationship between job dissatisfaction and turnover is unmistakable, suggesting that highly dissatisfied workers were from 14 to 42 percentage points more likely than comparable highly satisfied workers to subsequently change employers. The data also show that job dissatisfaction is more likely to lead to turnover among younger than older workers and among blacks than whites.

Only among young blacks is dissatisfaction more likely to lead to turnover among women than men. Furthermore, the evidence strongly suggests that job dissatisfaction imposes considerable costs on workers in terms of increased unemployment, decreased labor force participation, and decreased growth in annual earnings and occupational attainment. Yet there is virtually no evidence that dissatisfied workers were more inclined to relocate or receive formal skills training to attain more satisfying jobs.

While the relationship between job satisfaction and turnover has long been well established, these data have demonstrated the strength of the relationship using a very straightforward and easily administered measure of overall job satisfaction. Moreover, it has demonstrated this free of the usual limitations that have hampered almost all previous studies. These data are unique in that a strong relationship is observed using longitudinal data on representative national samples of four age-sex cohorts, controlling for individual differences in a wide range of personal and demographic characteristics.

To a considerable degree, the costs of job dissatisfaction in terms of increased unemployment, reduced labor force participation, and below-average growth in annual earnings reflect the costs of turnover which were disproportionately borne by the dissatisfied. Not all of the costs of job dissatisfaction, however, can be attributed to the greater tendency of dissatisfied workers to change jobs. To the contrary, among comparable workers who did not change employers there is considerable evidence within three of the cohorts that dissatisfied workers were substantially below-average in occupational and earnings advancement. Among those who changed employers, the dissatisfied were generally above-average in weeks of unemployment as well. The evidence thus suggests that job dissatisfaction may impose costs on workers whether or not they change employers. It also suggests that job dissatisfaction often leads to job changing that has been less carefully planned than that which takes place among comparable satisfied workers. Since the dissatisfied stand less to lose if their new jobs are not satisfactory, they apparently are less reluctant to leave a job without securing a new one beforehand.

Furthermore, there also is evidence that the costs of job dissatisfaction are offset somewhat by positive returns to mobility. Black youth who were dissatisfied with their jobs at the beginning of the period experienced above-average occupational advancement over the next 2-3 years, relative to comparable youth more highly satisfied with their jobs. To a considerable degree, this advancement was due to their greater tendency to change employers. The greater mobility of dissatisfied young white women also improved their relative occupational position.

Much of the costs of job dissatisfaction observed in this study stem from efforts by the dissatisfied to improve their wages and occupational attainment. Job dissatisfaction seems clearly linked to labor market imperfections, since the dissatisfied were disproportionately relegated to the low paying and low status jobs. Nonetheless, it appears that measures other than, or in addition to, increasing the earnings and occupational status of dissatisfied workers are required to reduce the costs of job dissatisfaction. According to these data, the dissatisfied within several of the subgroups would be more prone to turnover, increased unemployment, decreased labor force participation, and generally below-average growth in earnings even if their wage rates and occupational status were initially equal to those of comparable workers more highly satisfied with their jobs.

The foregoing suggests that the elimination of income and status disparities among comparable workers by employers, unions, and public policymakers is necessary but insufficient to eliminate the differences between satisfied and dissatisfied workers. Policymakers must also consider the numerous other aspects of the quality of employment situations that give rise to job dissatisfaction. Finally, public policy efforts designed to carefully monitor and chart the course of job dissatisfaction over time are necessary since the costs of dissatisfaction are obviously a function of the proportion of the work force less than "highly satisfied" with their jobs. If worker preferences and tastes for various aspects of work change more rapidly in the future than managerial efforts to meet them, the costs of such inattention to job dissatisfaction may increase. The findings of this study suggest that even a straightforward and easily administered measure of overall job satisfaction such as used here would be a valuable addition to the public's arsenal of social statistics.

APPENDIX TABLES TO CHAPTER II

The appendix to this chapter contains seventeen **tables of analyses** which supplement those presented in the text. Tables 2A.1 to 2A.4 facilitate the comparison of the findings in text Tables 2.1 and 2.9 by presenting for each cohort, and within cohorts by race, the results of the two text tables side-by-side. In addition, these appendix tables also include a comparison with the results when the control variable for occupational status is included in the regressions without the control variable for average hourly earnings. The three regressions for each of the eight subgroups therefore include analyses of the relationships between job dissatisfaction at the initial survey date and aspects of subsequent labor market experience controlling for differences at the beginning of the period in: (1) skills, abilities, and demographic variables; (2) skills, abilities, demographic variables, and occupational status; and (3) skills, abilities, demographic variables, occupational status, and average hourly earnings.

Appendix Tables 2A.6 to 2A.9 present reanalysis of the data presented in text Tables 2.3 through 2.6 recoding the job dissatisfaction variable into a dichotomous (dummy) variable taking the value 1 if the respondent was "highly satisfied" and 0 if "less than highly satisfied" at the initial survey date. This reanalysis permits an examination of whether the intensity of job dissatisfaction is important or whether all those less than highly satisfied had similar labor market experience during the subsequent period, regardless of their differences in the degree of dissatisfaction. This analysis also overcomes the problem of skewness on the job satisfaction measure by providing two categories more equal in response frequency. The results of the reanalysis suggest that the intensity of job dissatisfaction is meaningful, since averaging together those less than highly satisfied consistently results in reduced estimates of the effects of job dissatisfaction. Second, the results also suggest that conclusions based on the findings in text Tables 2.3 through 2.6 do not differ from those drawn from these appendix tables. Although the magnitude of the relationships varies depending upon the coding of the job dissatisfaction variable, the effects of dissatisfaction are consistently observed in both text and appendix tables and thus appear to be independent of the coding and skewness of the job dissatisfaction measure.

Appendix Tables 2A.10 through 2A.17 reanalyze further the data in text Tables 2.3 through 2.6 in two ways. First, Appendix Tables 2A.10 through 2A.13 are based on a redefinition of "movers" and "stayers." In text Tables 2.3-2.6, movers and stayers refer to job changing at any point during the period under study. In Appendix Tables 2A.10 through 2A.13 movers and stayers refer to whether or not a respondent moved during the first few years of the subsequent period. Those who moved later in the period are therefore considered stayers. The purpose of this modification was to ascertain whether differences between satisfied and dissatisfied workers among movers and stayers in text Tables 2.3-2.6 resulted from differences in the timing of their moves during the subsequent period. Appendix Tables 2A.14 through 2A.17 perform this reanalysis using the dichotomous measure of job satisfaction employed in Tables 2A.6 through 2A.9.

Overall, the data in Tables 2A.10 through 2A.13 provide some evidence that the relative advantage observed among dissatisfied movers stemmed at least in part from their moving earlier in the subsequent period and thereby having a longer payback period during which the returns to their mobility might be accrued. Also, it appears that those dissatisfied workers who moved later in the period pulled down the average of dissatisfied workers who remained with the same employer for the entire period. Recoding the job satisfaction measure into a dichotomous variable in Tables 2A.14 through 2A.17, leads essentially to the same conclusions reached in Tables 2A.10 through 2A.13, and also consistently suggests that the intensity of job dissatisfaction among those less than highly satisfied with their jobs at the beginning of the period is meaningful.

TABLE 2A.1

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION IN 1966 ON SELECTED ASPECTS OF 1966-1971 WORK EXPERIENCE AMONG WHITE AND BLACK MIDDLE-AGED MEN

(t-ratios)

	Whites			Blacks		
	Controlling for			Controlling for		
Aspects of 1966-1971 work experience	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings
Change of employer[b]	4.72 (4.01)***	4.35 (3.64)***	3.87 (3.09)***	6.79 (3.67)***	6.83 (3.67)***	6.32 (3.25)***
Change in occupational status	-0.61 (-1.32)	-0.61 (-1.32)	-0.50 (-1.02)	1.02 (1.64)*	1.02 (1.64)*	0.88 (1.34)
Change in hourly earnings	-0.04 (-0.84)	-0.00 (-0.06)	-0.00 (-0.06)	-0.04 (-0.73)	-0.01 (-0.28)	-0.01 (-0.28)
Change in annual earnings	-290 (-2.34)**	-193 (-1.57)	-163 (-1.38)	-270 (-2.19)**	-216 (-1.76)*	-178 (-1.39)
Weeks of unemployment	1.43 (3.84)***	1.32 (3.54)***	1.08 (2.76)***	1.80 (2.62)***	1.68 (2.44)**	1.53 (2.17)**
Susceptibility to unemployment[b]	4.96 (4.12)***	4.17 (3.44)***	3.47 (2.72)***	5.97 (2.92)***	5.50 (2.68)***	5.57 (2.63)***
Weeks of unemployment (for those with some unemployment)	1.86 (1.35)	1.98 (1.43)	1.48 (1.00)	1.65 (0.78)	1.66 (0.77)	1.40 (0.61)
Weeks out of labor force	5.18 (5.00)***	5.16 (4.91)***	4.81 (4.40)***	1.39 (0.81)	1.16 (0.68)	1.33 (0.75)
Susceptibility to withdrawal from labor force[b]	4.54 (2.95)***	3.36 (2.17)**	2.50 (1.54)	5.28 (2.16)**	5.03 (2.05)**	5.65 (2.18)**
Weeks out of labor force (for those with some weeks)	8.16 (3.85)***	8.71 (4.07)***	8.96 (3.94)***	-0.74 (-0.24)	-0.99 (-0.32)	-0.65 (-0.20)
Received training[b]	-2.26 (-1.83)*	-1.28 (-1.03)	-1.20 (-0.93)	-0.10 (-0.07)	0.42 (0.30)	0.07 (0.04)
Geographic mobility[b]	0.32 (0.38)	0.63 (0.75)	0.79 (0.90)	0.05 (0.07)	0.06 (0.09)	0.08 (0.11)
Number of sample cases[c]	2,520	2,520	2,520	1,061	1,061	1,061

[a] In all cases multiple regression analysis has been used to control for individual differences in education formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.2

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION IN 1966 ON SELECTED ASPECTS OF 1966-1969 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG MEN[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites			Blacks		
	Controlling for			Controlling for		
	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings
Change of employer[b]	11.31 (4.96)***	10.31 (4.52)***	10.05 (4.27)***	6.16 (1.76)*	5.81 (1.58)	5.85 (1.46)
Change in occupational status	0.19 (0.22)	-1.55 (-1.94)*	-1.75 (-2.13)**	1.73 (1.66)*	-0.19 (-0.28)	-0.39 (-0.38)
Change in hourly earnings	-0.11 (-2.29)**	-0.09 (-1.73)*	-0.09 (-1.73)*	-0.01 (-0.24)	0.02 (0.42)	0.02 (0.42)
Change in annual earnings	-514 (-3.73)***	-406 (2.92)***	-414 (-2.98)***	-285 (-1.65)*	-126 (-0.72)	-118 (-0.66)
Weeks of unemployment	0.98 (2.56)**	0.82 (2.12)**	0.79 (1.96)*	-0.69 (-0.86)	-0.85 (-1.02)	-0.84 (-0.95)
Susceptibility to unemployment[b]	11.18 (5.34)***	10.24 (4.87)***	10.18 (4.73)***	2.05 (0.56)	2.12 (0.56)	4.62 (1.15)
Weeks of unemployment (for those with some unemployment)	0.30 (0.30)	0.07 (0.08)	0.10 (0.09)	-1.93 (-1.31)	-2.05 (-1.35)	-2.63 (-1.59)
Weeks out of labor force	1.44 (2.13)**	1.29 (1.88)*	1.44 (2.11)**	0.09 (0.08)	0.33 (0.27)	0.32 (0.28)
Susceptibility to withdrawal from the labor force[b]	0.73 (0.31)	0.03 (0.14)	0.04 (0.02)	0.82 (0.22)	1.21 (0.32)	2.03 (0.50)
Weeks out of labor force (for those with some weeks)	3.15 (2.53)**	2.74 (2.17)**	3.11 (2.47)**	-0.47 (-0.23)	-0.06 (-0.03)	-0.97 (-0.41)
Received training[b]	0.17 (0.09)	1.50 (0.78)	0.94 (0.47)	0.71 (0.31)	2.12 (0.86)	2.21 (0.84)
Geographic mobility[b]	-1.92 (-1.15)	-1.54 (-0.91)	-1.52 (-0.86)	2.22 (1.07)	1.06 (0.50)	1.13 (0.52)
Number of sample cases[c]	1,199	1,199	1,199	490	490	490

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in particular aspects of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE A.3

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION IN 1967 ON SELECTED ASPECTS OF 1967-1971 WORK EXPERIENCE AMONG WHITE AND BLACK MATURE WOMEN[a]

(t-ratios)

	Whites			Blacks		
	Controlling for			Controlling for		
Aspects of 1967-1971 work experience	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings	Skills and demographics	Skills demographics, and occupation	Skills, demographics, occupation, and hourly earnings
Change of employer[b]	11.76 (4.54)***	11.38 (4.36)***	12.24 (4.61)***	6.25 (2.13)**	6.26 (2.13)**	7.68 (2.36)***
Change in occupational status	-0.05 (-1.10)	-0.03 (-0.61)	-0.03 (-0.61)	0.09 (1.69)*	0.10 (1.84)*	0.10 (1.84)*
Change in hourly earnings	-77 (-0.47)	-34 (-0.21)	-104 (-0.71)	106 (0.74)	135 (0.96)	216 (1.27)
Weeks of unemployment	2.17 (3.99)***	1.95 (3.56)***	2.04 (3.72)***	1.37 (2.13)**	1.32 (2.04)**	1.67 (2.35)**
Susceptibility to unemployment[b]	6.61 (3.26)***	5.80 (2.84)***	6.34 (2.98)***	6.22 (2.53)**	5.86 (2.38)**	7.61 (2.73)***
Weeks of unemployment (for those with some unemployment)	3.50 (2.14)**	3.11 (1.88)*	3.11 (1.98)**	1.77 (0.98)	1.73 (0.95)	2.24 (1.13)
Weeks out of labor force	3.74 (1.91)*	3.40 (1.72)*	1.98 (0.99)	1.11 (0.49)	0.93 (0.41)	0.72 (0.31)
Susceptibility to withdrawal from the labor force[b]	4.52 (1.88)*	3.49 (1.44)	3.14 (1.25)	-2.16 (-0.77)	-2.27 (-0.80)	-3.16 (-0.97)
Weeks out of labor force (for those with some weeks)	3.38 (1.15)	3.47 (1.16)	1.92 (0.62)	3.60 (1.08)	3.41 (1.02)	3.85 (1.02)
Received training[b]	-0.64 (-0.30)	0.56 (0.27)	0.54 (0.25)	1.58 (0.65)	2.70 (1.15)	2.07 (0.75)
Geographic mobility[b]	1.85 (1.29)	1.89 (1.30)	2.25 (1.52)	-1.46 (-1.07)	-1.43 (-1.05)	-0.82 (-0.59)
Number of sample cases[c]	944	944	944	433	433	433

[a] In all cases multiple regression analysis has been used to control for individual differences in education formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a one point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.4

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION IN 1966 ON SELECTED ASPECTS OF 1968-1970 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG WOMEN[a]

(t-ratios)

	Whites			Blacks		
	Controlling for			Controlling for		
Aspect of 1968-1970 work experience	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings	Skills and demographics	Skills, demographics, and occupation	Skills, demographics, occupation, and hourly earnings
Change of Employer[b]	10.55 (4.01)***	10.82 (4.09)***	9.00 (3.30)***	14.09 (3.27)***	16.49 (3.73)***	15.94 (3.22)***
Change in occupational status	-0.78 (-1.00)	-1.49 (-2.08)**	-1.35 (-1.81)**	4.53 (3.40)***	2.60 (2.04)**	2.78 (2.04)**
Change in hourly earnings	-0.03 (-0.99)	-0.03 (-0.74)	-0.03 (-0.74)	0.09 (1.84)*	0.12 (2.23)**	0.12 (2.23)**
Change in annual earnings	-261 (-2.81)***	-219 (-2.34)***	-159 (-1.70)*	-187 (-1.46)	-72 (-0.55)	21 (0.14)
Weeks of unemployment	0.64 (2.92)***	0.49 (2.20)**	0.47 (2.01)**	0.48 (0.83)	0.42 (0.69)	0.36 (0.51)
Susceptibility to unemployment[b]	4.26 (2.17)**	3.69 (1.85)*	3.60 (1.73)*	4.11 (1.12)	3.62 (0.94)	4.00 (0.90)
Weeks of unemployment (for those with some unemployment)	0.39 (2.00)**	0.99 (1.40)	0.83 (1.07)	0.56 (0.45)	0.72 (0.52)	0.55 (0.35)
Weeks out of labor force	2.39 (1.91)*	2.09 (1.64)	0.65 (0.50)	4.55 (2.39)**	4.16 (2.09)**	5.79 (2.59)**
Susceptibility to withdrawal from the labor force[b]	3.68 (1.71)*	3.36 (1.53)	2.55 (1.11)	3.16 (0.99)	2.26 (0.68)	5.36 (1.36)
Weeks out of labor force (for those with some weeks)	1.54 (0.98)	1.26 (0.79)	-0.34 (-0.20)	4.34 (2.01)**	4.15 (1.86)*	4.68 (1.96)**
Received training[b]	-1.21 (-0.61)	-1.05 (-0.52)	-0.66 (-0.32)	0.37 (0.11)	2.82 (0.85)	6.41 (1.09)
Geographic mobility[b]	-1.57 (-0.80)	-1.75 (-0.88)	-2.61 (-1.27)	-1.57 (-0.80)	2.37 (0.87)	4.47 (1.41)
Number of sample cases[c]	900	900	900	318	318	313

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in particular aspects of work experience associated with a one point difference in job dissatiafaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.5

REGRESSION RESULTS--THE EFFECTS OF JOB DISSATISFACTION ON SELECTED ASPECTS OF WORK EXPERIENCE CONTROLLING FOR EDUCATION: BY AGE, SEX, AND RACE[a]

(t-ratios)

Aspect of work experience	Men		Boys		Women		Girls	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Change of employer[b]	4.35 (3.64)***	6.83 (3.67)***	10.31 (4.52)***	5.81 (1.58)	11.38 (4.36)***	6.26 (2.13)**	10.82 (4.09)***	16.49 (3.73)***
Change in occupational status	-0.61 (-1.32)	1.02 (1.64)	-1.55 (-1.94)**	-0.19 (-0.20)	-0.36 (-0.57)	1.87 (3.02)***	-1.49 (-2.08)*	2.60 (2.04)**
Change in hourly earnings	-0.00 (-0.06)	-0.01 (-0.28)	-0.09 (-1.73)*	0.02 (0.42)	-0.03 (-0.61)	0.10 (1.84)*	-0.03 (-0.74)	0.12 (2.23)**
Change in annual earnings	-193 (-1.57)	-216 (-1.76)*	-406 (-2.92)***	-126 (-0.72)	-34 (-0.21)	135 (-.96)	-219 (-2.34)**	-72 (-0.55)
Weeks of unemployment	1.32 (3.54)***	1.68 (2.44)***	0.82 (2.12)**	-0.85 (-1.02)	1.95 (3.56)***	1.32 (2.04)**	0.49 (2.20)**	0.42 (0.69)
Susceptibility to unemployment[b]	4.17 (3.44)***	5.50 (2.68)***	10.24 (4.87)***	2.12 (0.56)	5.80 (2.84)***	5.86 (2.38)***	3.69 (1.85)*	3.62 (0.94)
Weeks of unemployment (for those with some unemployment)	1.98 (1.43)	1.66 (0.77)	0.07 (0.08)	-2.05 (-1.35)	3.11 (1.88)*	1.73 (0.95)	0.99 (1.40)	0.72 (0.52)
Weeks out of the labor force	5.16 (4.91)***	1.16 (0.68)	1.29 (1.88)*	0.33 (0.27)	3.40 (1.72)*	0.93 (0.41)	2.09 (1.64)*	4.16 (2.09)**
Susceptibility to withdrawal from the labor force[b]	3.36 (2.17)**	5.03 (2.05)**	0.03 (0.14)	1.21 (0.32)	3.49 (1.44)	-2.27 (-0.80)	3.36 (1.53)	2.26 (0.68)
Weeks out of the labor force (for those with some weeks)	8.71 (4.07)***	-0.99 (-0.32)	2.74 (2.17)**	-0.06 (-0.03)	3.47 (1.16)	3.41 (1.02)	1.26 (0.79)	4.15 (1.86)*
Received training[b]	-1.28 (-1.03)	0.42 (0.30)	1.50 (0.78)	2.12 (0.86)	0.56 (0.27)	2.70 (1.15)	-1.05 (-0.52)	2.82 (0.85)
Geographic mobility[b]	0.63 (0.75)	0.06 (0.09)	-1.54 (-0.91)	1.06 (0.50)	1.89 (1.30)	-1.43 (-1.05)	-1.75 (-0.88)	2.37 (0.87)
Number of sample cases[c]	2,520	1,061	1,199	499	944	433	900	318

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, rural versus urban residence, and occupation.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage or salary workers employed full-time at the first survey date. In addition, for cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.6

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MIDDLE-AGED MEN IN WORK EXPERIENCE:
BY RACE AND COMPARATIVE JOB STATUS, 1966-1971[a]

(t-ratios)

Aspect of 1966-1971 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-1.86 (-1.09)	1.42 (1.85)*	-3.92 (-1.41)	-1.02 (-0.96)
Change in hourly earnings	-0.57 (-3.18)***	0.52 (0.70)	-0.16 (-0.76)	7.44 (0.88)
Change in annual earnings	79 (0.15)	451 (2.17)**	635 (1.27)	199 (0.95)
Weeks of unemployment	-2.37 (-1.68)*	-0.35 (-0.64)	-3.68 (-1.86)*	0.03 (0.03)
Susceptibility to unemployment[b]	-2.09 (-0.54)	-3.43 (-1.89)*	5.59 (0.79)	-1.93 (-0.62)
Weeks of unemployment (for those with some unemployment)	-5.98 (-1.41)	-0.25 (-0.06)	-9.43 (-1.91)*	-1.43 (-0.25)
Weeks out of labor force	0.90 (0.62)	-0.35 (-5.49)***	-1.28 (-0.46)	-0.90 (-0.74)
Susceptibility to withdrawal from labor force[b]	-3.29 (-0.58)	-2.28 (-0.87)	-6.96 (-0.71)	-1.83 (-0.43)
Weeks out of labor force (for those with some weeks)	4.16 (1.23)	-0.54 (-0.29)	1.38 (0.28)	-1.86 (-0.63)
Received training[b]	6.73 (1.38)	1.68 (0.74)	-5.22 (-0.84)	1.86 (0.67)
Geographic mobility[b]	6.69 (2.36)**	-0.95 (-0.72)	-3.94 (-1.35)	0.86 (0.66)
Number of sample cases[c]	287	1,540	122	610

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coeficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.7

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG MEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1966-1969[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	1.46	4.93	-5.74	1.39
	(0.97)	(2.59)***	(-2.83)***	(0.50)
Change in hourly earnings	0.07	0.09	-0.08	0.26
	(0.68)	(0.81)	(-0.65)	(1.73)*
Change in annual earnings	321	696	-203	593
	(1.19)	(2.09)**	(-0.64)	(1.36)
Weeks of unemployment	-1.08	-0.85	1.53	-1.65
	(-2.08)**	(-1.30)	(1.11)	(-0.85)
Susceptibility to unemployment[b]	-11.91	-8.14	-0.32	-6.50
	(-3.14)***	(-1.70)*	(-0.05)	(-0.65)
Weeks of unemployment (for those with some unemployment)	-0.88	-3.09	2.54	-7.01
	(-0.67)	(-0.99)	(1.12)	(-1.07)
Weeks out of labor force	-1.46	-1.59	0.13	-1.29
	(-1.72)*	(-1.49)	(0.07)	(-0.49)
Susceptibility to withdrawal[b] from labor force	0.96	-5.33	-3.55	-12.35
	(0.22)	(-0.96)	(-0.47)	(-1.16)
Weeks out of labor force (for those with some weeks)	-2.66	-3.78	1.69	1.54
	(-1.87)*	(-1.77)*	(0.53)	(0.28)
Received training[b]	-5.75	4.93	-6.49	16.68
	(-1.39)	(0.90)	(-1.13)	(1.88)*
Geographic mobility[b]	9.18	5.78	-8.78	4.80
	(2.54)**	(1.21)	(-1.65)*	(0.58)
Number of sample cases[c]	530	344	227	88

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.8

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MATURE WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1967-1971[a]

(t-ratios)

Aspect of 1967-1971 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-0.52 (-0.43)	1.78 (1.56)	-3.31 (-2.42)**	-0.82 (-0.70)
Change in hourly earnings	0.08 (0.85)	0.08 (0.90)	0.30 (2.30)**	-0.02 (-0.17)
Change in annual earnings	-72 (-0.21)	-296 (-0.91)	-437 (-1.61)	-229 (-1.04)
Weeks of unemployment	-2.14 (-2.18)**	0.09 (0.10)	1.53 (1.82)*	0.04 (0.05)
Susceptibility to unemployment[b]	-7.62 (-1.76)*	-4.35 (-1.15)	-2.97 (-0.50)	-3.58 (-0.74)
Weeks of unemployment (for those with some unemployment)	-4.68 (-1.70)*	7.13 (1.79)*	-6.75 (-1.95)*	2.30 (0.46)
Weeks out of labor force	0.01 (0.00)	-1.28 (-0.64)	2.62 (0.74)	-0.10 (-0.04)
Susceptibility to withdrawal from labor force[b]	0.73 (0.13)	-3.79 (-0.80)	5.94 (0.80)	-0.16 (-0.03)
Weeks out of labor force (for those with some weeks)	-0.36 (-0.10)	-4.03 (-0.99)	1.58 (0.38)	-1.37 (-0.37)
Received training[b]	3.02 (0.64)	4.66 (1.07)	5.02 (0.81)	3.00 (0.57)
Geographic mobility	3.41 (1.20)	-0.32 (-0.21)	4.11 (1.26)	1.28 (0.46)
Number of sample cases[c]	385	583	204	313

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.9

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1968-1970[a]

(t-ratios)

Aspect of 1968-1970 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	2.57 (1.66)*	2.73 (1.72)*	-3.24 (-1.34)	2.22 (0.66)
Change in hourly earnings	0.06 (0.72)	0.07 (0.90)	-0.23 (-0.85)	-0.06 (-0.44)
Change in annual earnings	52 (0.26)	454 (2.28)**	-188 (-0.67)	453 (1.15)
Weeks of unemployment	-0.65 (-1.27)	0.11 (0.22)	0.65 (0.47)	-1.67 (-0.88)
Susceptibility to unemployment[b]	-1.81 (-0.39)	-1.47 (-0.32)	-2.55 (-0.31)	-12.55 (-1.10)
Weeks of unemployment (for those with some unemployment)	-1.33 (-0.99)	3.59 (0.98)	-1.84 (-0.72)	-1.30 (-0.19)
Weeks out of labor force	0.86 (0.46)	-1.98 (-1.07)	-5.07 (-1.56)	3.45 (0.77)
Susceptibility to withdrawal from labor force[b]	6.62 (2.09)**	-12.34 (-2.17)**	1.13 (0.14)	17.24 (1.51)
Weeks out of labor force (for those with some weeks)	-0.08 (-0.03)	-0.35 (-0.11)	-5.42 (-1.45)	0.07 (0.01)
Received training[b]	0.33 (0.06)	8.00 (1.41)	0.98 (0.11)	1.01 (0.08)
Geographic mobility[b]	8.79 (1.94)*	-0.97 (-0.21)	-6.64 (-1.13)	-4.64 (-0.58)
Number of sample cases[c]	272	338	127	72

[a] In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the last survey date. Employment status at the last survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at the beginning and end of the period. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.10

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MIDDLE-AGED MEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1966-1969[a]

(t-ratios)

Aspects of 1966-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	0.67 (0.61)	-0.87 (-1.58)	1.76 (1.23)	1.02 (1.30)
Change in hourly earnings	0.27 (2.25)**	-0.07 (-1.28)	-0.06 (-0.50)	-0.03 (-0.42)
Change in annual earnings	95 (0.32)	-327 (-2.28)**	-116 (-0.42)	-214 (-1.41)
Weeks of unemployment	3.40 (4.42)***	0.61 (1.56)	2.89 (2.19)**	-0.22 (-0.32)
Susceptibility to unemployment[b]	4.87 (1.89)*	4.03 (3.06)***	0.59 (0.13)	0.79 (0.33)
Weeks of unemployment (for those with some unemployment)	5.38 (2.30)**	-0.05 (-0.03)	4.20 (1.31)	-1.88 (-0.59)
Weeks out of labor force	2.02 (1.47)	2.40 (3.44)***	0.07 (0.03)	1.29 (1.04)
Susceptibility to withdrawal[b] from labor force	5.55 (1.55)	2.61 (1.43)	3.45 (0.61)	3.06 (1.00)
Weeks out of labor force (for those with some weeks)	2.09 (0.72)	4.54 (2.88)***	-4.65 (-1.17)	1.91 (0.80)
Received training[b]	-2.84 (-0.95)	-1.50 (-0.99)	3.31 (0.97)	-1.91 (-1.07)
Geographic mobility[b]	-5.13 (-2.83)***	0.67 (0.73)	-2.18 (-1.24)	-0.07 (-0.07)
Number of sample cases[c]	233	1,721	96	716

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[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1966 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

$*p < .10$; $**p < .05$; $***p < .01$ (two-tailed tests).

TABLE 2A.11

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG MEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1966-1967

(t-ratios)

Aspect of 1966-1967 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-0.81 (-0.32)	-2.19 (-2.02)**	2.29 (1.43)	-1.82 (-1.23)
Change in hourly earnings	-0.03 (-0.33)	-0.10 (-1.53)	0.06 (0.69)	-0.52 (-0.67)
Change in annual earnings	144 (0.24)	-641 (-3.51)***	204 (0.68)	-463 (-2.07)**
Weeks of unemployment	0.12 (0.23)	1.34 (3.10)***	-1.76 (-1.63)	-0.32 (-0.32)
Susceptibility to unemployment[b]	8.43 (2.55)**	9.32 (3.48)***	-0.58 (-0.10)	1.54 (0.30)
Weeks of unemployment (for those with some unemployment)	-0.82 (-0.71)	2.57 (1.95)*	-2.35 (-1.34)	-2.50 (-1.09)
Weeks out of labor force	-1.73 (-1.82)*	1.97 (2.55)**	-1.38 (-0.40)	-0.12 (-0.08)
Susceptibility to withdrawal from the labor force[b]	-3.29 (-0.86)	2.12 (0.69)	1.20 (0.21)	-1.72 (-0.32)
Weeks out of the labor force (for those with some weeks)	-2.50 (-1.51)	4.59 (2.98)***	-4.57 (-0.72)	0.14 (0.05)
Received training[b]	6.14 (1.91)*	-1.69 (-0.59)	10.89 (2.67)***	-5.86 (-1.47)
Geographic mobility[b]	-5.79 (-2.06)*	-0.75 (-0.30)	1.91 (0.53)	2.71 (0.78)
Number of sample cases[c]	307	566	122	170

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1966 and 1967. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reportedrefers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to futher sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

Table 2A.12

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MATURE WOMEN IN WORK EXPERIENCE:
BY RACE AND COMPARATIVE JOB STATUS, 1967-1969[a]

(t-ratios)

Aspect of 1967-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	0.67 (0.53)	-1.50 (-1.87)*	3.48 (3.05)***	1.79 (2.03)**
Change in hourly earnings	0.06 (0.55)	-0.13 (-1.89)*	0.14 (1.38)	0.15 (1.89)*
Change in annual earnings	476 (1.26)	-165 (-0.68)	421 (1.27)	118 (0.48)
Weeks of unemployment	1.28 (1.21)	1.64 (2.45)**	0.85 (0.85)	1.39 (1.80)*
Susceptibility to unemployment[b]	10.47 (2.47)**	6.45 (2.40)**	-0.08 (-0.02)	9.08 (2.51)**
Weeks of unemployment (for those with some unemployment)	0.79 (0.24)	2.30 (0.95)	5.53 (1.69)*	0.49 (0.17)
Weeks out of the labor force	-4.21 (-1.78)*	1.97 (1.32)	-1.08 (-0.46)	3.29 (1.81)*
Susceptibility to withdrawal from labor force[b]	-2.99 (-0.55)	8.35 (2.44)**	-6.52 (-1.09)	-0.44 (-0.10)
Weeks out of labor force (for those with some weeks	-6.51 (-1.61)	-0.29 (-0.11)	2.40 (0.50)	7.03 (2.21)**
Received training[b]	3.95 (0.81)	-3.29 (-1.07)	6.59 (1.25)	-6.04 (-1.48)
Geographic mobility[b]	3.19 (1.12)	0.91 (0.51)	-2.10 (-1.00)	-0.83 (-0.51)
Number of sample cases[c]	**199**	**717**	**116**	**316**

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1967 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 2A.13

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS 1968-1969[a]

(t-ratios)

Aspect of 1968-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-1.41 (-1.25)	0.19 (0.07)	4.84 (2.12)**	0.42 (0.20)
Change in hourly earnings	-0.03 (-0.53)	-0.08 (-1.71)*	0.08 (0.90)	0.92 (0.97)
Change in annual earnings	-10 (-0.06)	-417 (-3.50)***	-20 (-0.08)	-229 (-1.03)
Weeks of unemployment	0.20 (0.58)	0.52 (2.00)**	0.45 (0.54)	-0.09 (-0.13)
Susceptibility to unemployment[b]	-2.11 (-0.62)	3.33 (1.29)	-3.33 (-0.48)	-1.15 (-0.20)
Weeks of unemployment (for those with some unemployment)	0.80 (0.78)	1.43 (1.10)	2.05 (1.24)	-0.69 (-0.29)
Weeks out of labor force	0.37 (0.27)	2.97 (2.85)***	-0.25 (-0.09)	4.88 (2.07)
Susceptibility to withdrawal[b] from labor force	-1.98 (-0.47)	5.64 (1.74)*	-14.41 (-1.99)**	7.80 (1.27)
Weeks out of the labor force (for those with some weeks)	0.95 (0.54)	3.64 (2.31)**	4.79 (1.36)	4.48 (1.54)
Received training[b]	-3.38 (-0.85)	-1.26 (-0.40)	4.44 (0.67)	7.55 (0.46)
Geographic mobility[b]	-8.57 (-1.35)	-1.60 (-0.60)	1.37 (0.27)	2.41 (0.55)
Number of sample cases[c]	191	483	73	144

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1968 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience associated with a 1 point difference in job dissatisfaction.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to futher sample restrictions for particular aspects of work experience examined.

$*p < .10$; $**p < .05$; $***p < .01$ (two-tailed tests).

TABLE 2A.14

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MIDDLE-AGED MEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1966-1969[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	-1.98 (-1.05)	1.13 (1.53)	-3.19 (-1.14)	-1.31 (-1.30)
Change in hourly earnings	-0.43 (-2.21)**	0.04 (0.49)	0.17 (0.74)	0.03 (0.37)
Change in annual earnings	-141 (-0.27)	459 (2.34)**	659 (1.21)	236 (1.22)
Weeks of unemployment	-2.69 (-1.98) **	-0.54 (-1.00)	-6.69 (-2.63)**	-0.08 (-0.09)
Susceptibility to unemployment[b]	-2.95 (-0.65)	-3.72 (-2.07)**	-3.81 (-0.44)	-3.80 (-1.21)
Weeks of unemployment (for those with some unemployment)	-5.49 (-1.22)	0.32 (0.10)	-9.15 (-1.48)	2.33 (0.60)
Weeks out of labor force	0.37 (0.15)	-2.02 (-2.13)**	-3.97 (-0.89)	-2.18 (-1.36)
Susceptibility to withdrawal from labor force[b]	-8.88 (-1.41)	-1.71 (-0.69)	-11.34 (-1.03)	-3.03 (0.76)
Weeks out of labor force (for those with some weeks)	5.06 (0.95)	-4.38 (-1.64)	0.08 (0.01)	-4.64 (-1.41)
Received training[b]	9.70 (1.86)*	-0.60 (-0.29)	-1.36 (-0.21)	2.22 (0.93)
Geographic mobility[b]	10.66 (3.38)**	-0.95 (-0.76)	0.59 (0.18)	-0.05 (-0.04)
Number of sample cases[c]	233	1,721	96	716

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[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1966 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.15

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG MEN IN WORK EXPERIENCE:
BY RACE AND COMPARATIVE JOB STATUS, 1966-1967[a]

(t-ratios)

Aspect of 1966-1967 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	1.76 (0.91)	4.03 (2.77)***	-7.82 (-3.12)***	1.80 (0.85)
Change in hourly earnings	0.01 (0.06)	0.02 (0.15)	-0.05 (-0.38)	0.01 (0.86)
Change in annual earnings	-153 (-0.45)	916 (3.62)***	-534 (-1.29)	761 (2.29)**
Weeks of unemployment	0.08 (0.10)	-1.74 (-2.94)***	2.25 (1.30)	0.43 (0.29)
Susceptibility to unemployment[b]	-14.16 (-2.89)***	-11.80 (-3.21)***	-0.33 (-0.04)	-7.01 (-0.92)
Weeks of unemployment (for those with some unemployment	2.45 (1.34)	-4.68 (-2.26)**	3.39 (1.24)	3.64 (1.15)
Weeks out of labor force	1.82 (1.28)	-2.86 (-2.69)***	0.48 (0.18)	0.99 (0.43)
Susceptibility to withdrawal from labor force[b]	5.49 (0.97)	-7.91 (-1.86)*	-13.61 (-1.47)	2.87 (0.36)
Weeks out of labor force (for those with some weeks)	1.77 (0.73)	-5.30 (-2.65)***	5.51 (1.21)	2.81 (0.66)
Received training[b]	-11.85 (-2.40)**	1.68 (0.43)	-4.97 (-0.75)	9.30 (1.54)
Geographic mobility[b]	8.43 (1.96)**	3.14 (0.93)	-3.27 (-0.57)	-5.79 (-1.10)
Number of sample cases[c]	307	566	122	170

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1966 and 1967. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to futher sample restrictions for particular aspects of work experience examined.

*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).

TABLE 2A.16

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED MATURE WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1967-1969[a]

(t-ratios)

Aspect of 1967-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	2.85 (1.35)	1.44 (1.42)	-4.97 (-2.64)***	-1.19 (-1.01)
Change in hourly earnings	0.32 (1.96)**	0.16 (2.05)**	-0.31 (-1.72)*	-0.17 (-1.61)
Change in annual earnings	615 (1.00)	83 (0.28)	-287 (-0.54)	-223 (-0.67)
Weeks of unemployment	-1.31 (-0.77)	-1.56 (-1.93)*	-1.89 (-1.16)	-1.30 (-1.26)
Susceptibility to unemployment[b]	2.24 (0.33)	-4.96 (-1.53)	-3.60 (-0.47)	-11.13 (-2.31)**
Weeks of unemployment (for those with some unemployment)	-5.28 (-0.84)	-3.81 (-1.15)	-6.19 (-1.34)	0.86 (0.21)
Weeks out of the labor force	-8.92 (-2.36)**	-2.85 (-1.58)	-3.18 (-0.83)	-4.14 (-1.72)*
Susceptibility to withdrawal from labor force[b]	-13.65 (-1.57)	-6.43 (-1.55)	-1.81 (-0.19)	-0.46 (-0.08)
Weeks out of labor force (for those with some weeks)	-10.95 (-1.61)	-2.69 (-0.81)	-7.73 (-1.19)	-8.99 (2.11)**
Received training[b]	10.45 (1.34)	3.90 (1.06)	-12.08 (-1.41)	10.97 (2.04)**
Geographic mobility[b]	5.01 (1.09)	1.11 (0.51)	3.97 (1.15)	0.33 (0.15)
Number of sample cases[c]	199	717	116	316

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1967 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, [illegible] were employed at the second survey date. Employment status at the second survey is [illegible] by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. Actual sample sizes in some cases include fewer respondents due to other sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 2A.17

DIFFERENCES BETWEEN SATISFIED AND DISSATISFIED YOUNG WOMEN IN WORK EXPERIENCE: BY RACE AND COMPARATIVE JOB STATUS, 1968-1969[a]

(t-ratios)

Aspect of 1968-1969 work experience	Whites		Blacks	
	Movers	Stayers	Movers	Stayers
Change in occupational status	2.17 (1.10)	3.35 (2.50)**	-3.10 (-0.81)	-1.17 (-0.42)
Change in hourly earnings	0.08 (0.77)	0.10 (1.56)	-0.23 (-1.54)	-0.11 (-1.05)
Change in annual earnings	133 (0.50)	598 (3.48)***	-491 (-1.21)	405 (1.39)
Weeks of unemployment	-0.17 (-0.29)	-0.40 (-1.04)	1.16 (0.85)	-0.33 (-0.35)
Susceptibility to unemployment[b]	2.89 (0.50)	-3.97 (-1.04)	7.55 (0.67)	0.36 (0.05)
Weeks of unemployment (for those with some unemployment)	-0.58 (-0.35)	-0.76 (-0.35)	-0.73 (-0.27)	0.43 (0.13)
Weeks out of labor force	0.42 (0.18)	-3.92 (-2.53)**	5.19 (1.15)	-9.31 (-2.98)***
Susceptibility to withdrawal from labor force[b]	5.51 (0.76)	-11.37 (-2.38)**	19.03 (1.59)	-10.77 (-1.30)
Weeks out of labor force (for those with some weeks)	-0.22 (-0.07)	-3.23 (-1.41)	1.01 (0.19)	-11.20 (-2.82)***
Received training[b]	4.24 (0.62)	2.59 (0.56)	-15.46 (-1.43)	4.53 (0.59)
Geographic mobility	12.01 (2.03)**	1.07 (0.27)	-11.97 (-1.41)	-2.52 (-0.43)
Number of sample cases[c]	191	483	273	144

[a] Firm movers and stayers refer to whether or not a change of employer occurred between 1968 and 1969. In all cases multiple regression analysis has been used to control for individual differences in education, formal training, years of work experience, length of service with employer, health, marital status, region of residence, and rural versus urban residence.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as the percentage point differential in the particular aspect of work experience between "highly satisfied" and less than "highly satisfied" workers.

[c] The number of sample cases reported refers to wage and salary workers employed full-time at the first survey date, who also were employed at the second survey date. Employment status at the second survey date was necessitated by the fact that information concerning turnover behavior was ascertainable only for those employed at both survey dates. In addition, for the cohorts of youth the sample is at all times restricted to those not enrolled in school. Actual sample sizes in some cases include fewer respondents due to futher sample restrictions for particular aspects of work experience examined.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

CHAPTER III

LEVELS AND TRENDS IN JOB SATISFACTION, 1966-1972

Paul J. Andrisani

I. INTRODUCTION

The principal purpose of this chapter is to examine a number of aspects of job satisfaction during the 1966-1972 period. First, the chapter examines levels and trends in job satisfaction among the workers who comprise the four NLS cohorts.[1] Second, within each cohort it examines levels and trends in job satisfaction during the period for major occupational, industrial, and income groups. Third, to the extent the NLS data permit, the chapter examines whether any trends in job satisfaction may be linked to the changing composition of the work force, to changing worker preferences and "tastes" for various types of work rewards, or to the state of the economy and course of the business cycle.

Fourth, the chapter explores a number of personal and demographic correlates of job satisfaction in an effort to discover where dissatisfaction has been most substantial and to ascertain whether job dissatisfaction is most serious among those whose unique labor market problems have already been singled out by policy makers for special attention--e.g., the unskilled and uneducated, and minority group members faced with limited employment opportunities. Fifth, it examines the extent to which trends in job satisfaction are correlated with personal, demographic, and job-related characteristics.

II. CONCEPTUAL FRAMEWORK

Economic Approaches to Job Satisfaction

Job satisfaction is an extremely elusive concept. Although it has played but a minor role in neoclassical economic theory, it played a major one in the writings of classical economists. In classical theory, which stems from Adam Smith (1937, Book I, Ch. 10), workers sought not to maximize income but to maximize job satisfaction, which comprised nonpecuniary as well as pecuniary aspects of employment. Wage differentials among workers of equal skill were thought to compensate for differences in the nonwage attractiveness of jobs.

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[1] As a result of the generous assistance of Gilbert Nestel of The Ohio State University Center for Human Resource Research, data on job satisfaction made available for public use after our analysis had begun were provided to enable a more comprehensive exploration of trends in job satisfaction.

When the wage differential is just large enough to offset nonwage differences in jobs, movement between jobs ceases and the market achieves an optimal allocation of human resources. Unless there are barriers to mobility, at equilibrium no worker could enhance either his or her own satisfaction or the total social product by making any kind of job change. Workers might improve their wages through mobility, but only at the expense of a decrease in their total job satisfaction.

This does not mean, however, that all workers would be equally satisfied or highly satisfied with this optimal allocation process determined in the marketplace. It means only that so long as things remain the same no one could improve his or her situation in the marketplace. At long run equilibrium, therefore, individual differences in job satisfaction are either reflective of differences in tastes or reflective of differences in skills and abilities. In disequilibrium, differences may also reflect the fact that individuals are not in the most suitable jobs they are able to fill.

The supply and demand factors which neoclassical economists use to explain the distribution of labor income thus may be thought to affect also the distribution of job satisfaction. Variables representing skills and abilities are expected to have a straightforward relationship with job satisfaction, for the greater a worker's potential productivity, the greater are opportunities for satisfying jobs. The "tastes" variables, however, have no such simple a relationship with degree of satisfaction. Workers' perceptions of what constitutes a satisfying job may be colored by the circumstances in which they find themselves and by their attitudes toward the value of market work. With working women, for example, it is likely that conflicting responsibilities at work and at home among those with "dual careers" may prevent them from utilizing their productive talents to best advantage. As a consequence, many may be compelled to accept unfulfilling jobs in order to keep market work from too seriously interfering with family responsibilities.

Characteristics of labor markets may also be important determinants of one's ability to obtain a highly satisfying job. The demand for productive talents of workers may vary substantially, for example, according to region of residence, to the degree of urbanization in local labor markets, and to levels of unemployment in local labor markets. In addition, internal labor markets of firms governed by collective bargaining agreements, or indirectly influenced by the threat of unionization, may differ considerably in operation from those of similar firms uninfluenced by union contracts. To the extent that unions can buffer internal labor markets from the forces of the external labor market, they may lead to employment situations which are vastly different from those in unorganized firms in terms of wages, perquisites, and equity in the administration of work rules. As a consequence, workers who are covered by collective bargaining agreements may tend to be more highly satisfied with their jobs than comparable workers who are unorganized.

Perhaps the most important factors on the demand side of the market that may adversely affect the job satisfaction of workers are barriers to worker mobility. These market imperfections result in the underutilization of worker talents and in an inequitable distribution of labor market rewards, which, in turn, can be expected to lead to job dissatisfaction. While virtually impossible to isolate completely, measures of underutilization of talents and of unequal labor market rewards among comparable workers can be constructed to capture some of the effects of imperfect labor markets.

Psychological Approaches to Job Satisfaction

The economic framework for examining correlates and determinants of job satisfaction is not entirely incompatible with those drawn principally from the psychological literature nor, in actuality, is it much more simplistic. According to Lawler (1973, Ch. 4) and Locke (1976), there are at least four psychological approaches in the theoretical literature on job satisfaction. These include "fulfillment theory," "discrepancy theory," "equity theory," and "two-factor theory." In "fulfillment theory," job satisfaction is simply a function of the degree to which a job provides the worker with positively valued outcomes. Little attention is devoted to the factors which enable an individual to attain those jobs that provide sufficient levels of valued rewards. Furthermore, all workers apparently are thought to value precisely the same rewards.

In "discrepancy theory," satisfaction is viewed to be more than a function of the amount of rewards a worker received. The crucial distinction made by discrepancy theorists is between work rewards actually received and work rewards desired, expected, or perceived by workers to be justly due to them. The relevant discrepancy generally is between the actual level of a particular work reward that is present in a job and the level of reward that a worker feels there should be. Discrepancy theory therefore builds upon fulfillment theory by incorporating the notions that workers may differ both in terms of the outcomes they prefer or expect, as well as in terms of what they feel they should receive from their jobs.

In the "equity theory" approach, based mainly on the work of Adams (1963), job satisfaction exists when the individual perceives equity in the ratio of what he or she puts into a job and what he or she receives from the job. Perceptions of a fair or equitable ratio are thought to depend largely on the ratio of inputs to rewards of "significant others" with whom an individual feels that a relevant comparison of input/reward ratios can be made.

In the "two-factor theory" which stems mainly from the work of Herzberg (1959, 1966) and his associates, it is suggested that only "intrinsic" factors contribute to positive feelings about one's job, while only "extrinsic" factors contribute to negative feelings about jobs. Intrinsic factors stem mainly from the nature of the work and the job content, while extrinsic or environmental factors are external to the job content. Most important, only the intrinsic factors are thought to influence productivity, since performance is purportedly linked only to positive job feelings.

Lawler's (1973, Ch. 4) model of job satisfaction attempts to integrate these disparate approaches, and is applicable to facet-specific satisfaction as well as to overall satisfaction. Basically, the Lawler model posits that job satisfaction is a function of two general factors: (1) perceived amount of rewards received, and (2) perceived amount of rewards that should be received. What an individual believes he or she should receive is influenced by three variables: "perceived personal job inputs," "perceived inputs and outputs of referent others," and "perceived job characteristics." Compatible with economic approaches to job satisfaction, Lawler (1973, p. 76) has contended:

> Perhaps the most important influence is perceived job inputs. These inputs include all of the skills, abilities, and training a person brings to the job as well as the behavior he exhibits on the job. The greater he perceives his inputs to be, the higher will be his perception of what his outcomes should be . . . but his perception is also shown to be influenced by his perception of what his "referent others" receive. The higher the outcome levels of his referent others, the lower his outcome level will appear.

III. HOW WORKERS LIKED THEIR JOBS, 1966-1972

A recent review of seven national surveys conducted between 1958 and 1973 provides scant support for the thesis that levels of job dissatisfaction have been rising steadily over the past decade.[2] The often cited 10 percentage point drop in job satisfaction registered by the Gallup Poll between 1969 and 1973[3] was accounted for in this review by the inclusion in the Gallup sample of a large number of respondents who did not work for pay and by the inclusion of "don't know" responses in Gallup's percentage bases. In addition, the lack of a consistent trend in worker dissatisfaction for the labor force as a whole did not appear to be the result of offsetting trends among different age, sex, or race groups. Even among black and younger workers, for example, where the data implied above-average levels of dissatisfaction throughout the period, there was little to suggest that dissatisfaction was on the rise.

In discussing these findings, Quinn et al. (1974) noted that changes in the composition of the labor force have been associated with increasing employment in jobs historically found to be attractive to workers, and with declining employment in occupations which workers have typically held in low esteem. Their report referred to indirect evidence of certain improvements in jobs which may have influenced the degree of job satisfaction expressed by workers. Their data offered little reason, however, to suspect that either the mobility of workers or the trend in job improvement had increased the level of overall satisfaction during the past 10 years.

According to Quinn et al., there is a possibility that the lack of an overall trend in worker dissatisfaction is the result of offsetting trends within more carefully defined subgroups than their data permitted to be analyzed.[4] The absence of a trend in job dissatisfaction also may be the result of the way in which worker responses to the job satisfaction questions were categorized. Since responses were classified only as "satisfied" or "dissatisfied," increases or decreases in job satisfaction during the period could easily have been masked within either of these broad categories.

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[2] Quinn et al. (1974, pp. 3-8).

[3] See Strauss (1974) for a review of this literature. Other citations may be found in Chapter I.

Tables 3.1 and 3.2 show the response patterns of the four NLS cohorts to the job satisfaction question during the 1966-1972 period. The question eliciting these responses was virtually identical to those which have provided most of the evidence in other studies relating to trends in job satisfaction.[5] Both tables reveal, consistent with the findings of other studies,[6] that remarkably few workers explicitly expressed a "disliking" for their jobs at any survey date between 1966 and 1972. Fewer than 15 percent of the workers in each of the eight subgroups responded that they disliked their job somewhat or disliked it very much

Methodological reasons may explain why responses to the NLS job satisfaction question are generally so favorable. Respondents may perceive that explicitly reporting dissatisfaction with their jobs is an admission of failure or a socially undesirable response.[7] Or, when workers are unable to find more attractive jobs, they may lower their aspirations and expectations, demand less of their jobs, and subsequently report themselves to be at least somewhat satisfied with their jobs.[8] Nonetheless, it appears unlikely that so few workers would openly express dissatisfaction with their jobs if alienation were as high and as dysfunctional in terms of productivity and spillover effects as the literature on the "quality of working lives" implies.[9]

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[4] Small sample sizes, for instance, precluded trend analysis for blacks with appropriate controls for either age or sex. Similarly, it was not possible within demographic groups to examine for trends within broad occupational categories. Sample sizes for seven of the surveys are disaggregated according to several demographic characteristics and displayed in Quinn et al. (1974, Appendix A, p. 50).

[5] Respondents were asked, "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?" Workers who responded "like it very much" are referred to in this chapter as the "highly satisfied." For a discussion of the various measures of job satisfaction found in similar studies, particularly those examining the possibility of trends, see Quinn et al. (1974).

[6] See, for example: Blauner (1963); Manpower Report of the President (1968, p. 48); Quinn et al. (1974); Strauss (1974); and Work in America (1972).

[7] Parnes et al. (1970b, p. 153).

[8] March and Simon (1968, Ch. 3).

[9] Citations to this literature may be found in Chapter I of this volume.

TABLE 3.1

DEGREE OF JOB SATISFACTION AMONG MEN, 1966-1971, BY AGE AND RACE[a]

(Percentage Distribution)

Degree of job satisfaction	Whites						Blacks					
	1966	1967	1968	1969	1970	1971	1966	1967	1968	1969	1970	1971
Men 45-59 years of age in 1966												
Number of respondents	3,277	3,074	b	2,773	b	2,521	1,247	1,156	b	1,055	b	899
Total percent	100.0	100.0	b	100.0	b	100.0	100.0	100.0	b	100.0	b	100.0
Highly satisfied	57.9	56.7	b	54.7	b	47.4	51.3	50.3	b	51.9	b	50.3
Somewhat satisfied	35.1	36.7	b	38.7	b	44.7	40.3	42.5	b	41.9	b	45.1
Somewhat dissatisfied	4.7	4.4	b	4.8	b	6.3	5.4	4.3	b	4.5	b	3.3
Highly dissatisfied	2.3	2.2	b	1.8	b	1.6	2.9	2.9	b	1.7	b	1.4
Men 14-24 years of age in 1966												
Number of respondents	1,298	b	b	1,682	1,904	b	521	b	b	655	690	b
Total percent	100.0	b	b	100.0	100.0	b	100.0	b	b	100.0	100.0	b
Highly satisfied	51.7	b	b	52.7	48.2	b	33.9	b	b	37.5	38.9	b
Somewhat satisfied	39.2	b	b	40.4	42.5	b	52.1	b	b	50.4	47.2	b
Somewhat dissatisfied	6.9	b	b	5.1	6.7	b	9.7	b	b	7.6	8.5	b
Highly dissatisfied	2.2	b	b	1.8	2.7	b	4.3	b	b	4.5	5.3	b

[a] Sample includes respondents employed and not enrolled in school at the survey date in question.
[b] Data were not available.

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TABLE 3.2

DEGREE OF JOB SATISFACTION AMONG WOMEN, 1967-1972, BY AGE AND RACE[a]

(Percentage Distribution)

Degree of job satisfaction	Whites						Blacks					
	1967	1968	1969	1970	1971	1972	1967	1968	1969	1970	1971	1972
Women 30-44 years of age in 1967												
Number of respondents	1,650	b	1,648	b	1,730	1,721	836	b	808	b	743	714
Total percent	100.0	b	100.0	b	100.0	100.0	100.0	b	100.0	b	100.0	100.0
Highly satisfied	67.5	b	64.3	b	64.5	58.8	55.6	b	56.6	b	55.4	50.2
Somewhat satisfied	27.7	b	30.2	b	31.3	34.5	35.4	b	37.6	b	39.9	43.4
Somewhat dissatisfied	3.4	b	3.4	b	3.2	5.1	6.5	b	4.1	b	3.7	4.2
Highly dissatisfied	1.4	b	2.2	b	1.0	1.6	2.6	b	1.7	b	1.0	2.2
Women 14-24 years of age in 1968												
Number of respondents	b	1,005	1,108	1,259	1,345	b	b	358	413	441	507	b
Total percent	b	100.0	100.0	100.0	100.0	b	b	100.0	100.0	100.0	100.0	b
Highly satisfied	b	61.5	61.2	55.8	54.0	b	b	50.7	47.7	49.2	47.7	b
Somewhat satisfied	b	29.9	29.2	36.3	37.9	b	b	37.6	37.9	41.5	43.3	b
Somewhat dissatisfied	b	6.2	4.0	5.9	5.7	b	b	7.4	5.0	5.1	6.3	b
Highly dissatisfied	b	3.4	5.7	2.0	2.3	b	b	4.3	9.4	4.2	2.8	b

[a] Sample includes respondents employed and not enrolled in school at the survey date in question.

[b] Data were not available.

Furthermore, should absolute levels of dissatisfaction be seriously understated with this measure, individual differences in responses to the question may still be meaningful. There is considerable evidence of the predictive validity of this measure of job satisfaction even when controlling for a number of characteristics of jobs, workers, and labor markets.[10] Moreover, as Quinn et al. (1974, p. 52) have concluded:[11]

> While existing measures of job satisfaction provide dubious estimates of absolute levels of satisfaction, they prove very useful for comparing the satisfaction of workers in different occupations, at different levels of the hierarchy, in different demographic groups, and at different times.

Despite the small proportion who openly expressed job dissatisfaction, the data in Tables 3.1 and 3.2 show that among the eight subgroups the proportion of workers less than highly satisfied during the 1966-1972 period ranged as high as 66.1 percent. The data also demonstrate that job satisfaction did decline somewhat within each cohort between 1966 and 1972, particularly after 1969 and generally more so among whites than blacks. Only among black men is there no evidence of a downward trend in job satisfaction. Among the younger black males the proportion highly satisfied with their jobs actually rose monotonically from 33.9 percent in 1966 to 38.9 percent in 1970. For the other subgroups, Tables 3.1 and 3.2 show that the proportion highly satisfied with their jobs declined by from 3 percentage points among the younger black women to 10.5 percentage points among the older white men.

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[10] See Chapter II of this volume for evidence of the predictive validity of the NLS job satisfaction measure. Also see Parnes et al. (1975a, Ch. 3) and Parnes et al. (1975b, Ch. 7).

[11] Lawler (1973, pp. 79-80) has drawn similar conclusions on this issue: "Because of these methodological complexities, it is difficult to draw conclusions about the number of workers who are or are not satisfied with their jobs or with some facet of their jobs. This drawback does not mean, however, that meaningful research on satisfaction is impossible. On the contrary, interesting and important research has been and can be done on the determinants of job satisfaction. For example, the relationship between personal-input factors--such as education level, sex, and age and seniority--and job or facet satisfaction can be ascertained by simply comparing those people who report they are satisfied with those people who report they are dissatisfied and checking the results to see if the two groups differ in any systematic manner. The number of people reporting satisfaction is not crucial for this purpose. What is important is that we distinguish those people who tend to be more satisfied from those people who tend to be less satisfied."

Several points should be made about the decline in job satisfaction among the four NLS cohorts, and about age-sex-race differences in levels and trends in satisfaction. First, since these are panel data rather than a series of cross-sections of the work force, the decline occurred while these workers were accumulating up to five additional years of work experience.[12] With the possible exception of the middle-aged men, this experience might have been expected to have improved their labor market situations and enhanced their job satisfaction. Second, most of the decline that occurred reflected a shift from "highly satisfied" to "somewhat satisfied," rather than from "satisfied" to "dissatisfied." Thus, it is likely that the absence of a trend in the data reported by Quinn et al. (1974) resulted from an aggregation bias in their classification of responses to the job satisfaction question.

Third, on the basis of the limited trend data reported here, it appears that the observed decline in job satisfaction is mainly a product of the 1970's, which is generally the contention of those who have advanced the "quality of working lives" thesis.[13] Finally, the data generally appear to be consistent with those of other national surveys with respect to age, sex, and race differences.[14] It is hardly surprising to find that black workers were less likely than their white counterparts to be highly satisfied with their jobs, given the vast racial disparities in employment experience. As other studies have also shown, younger workers tend to be less highly satisfied with their jobs than older workers, and women appear not to differ consistently from men in the proportion who are "satisfied" with their jobs. However, the greater disaggregation of the responses in this study suggests that women are more likely to be highly satisfied with their jobs than men.

IV. PROPORTION HIGHLY SATISFIED BY OCCUPATION, INDUSTRY, AND WAGE RATES, 1966-1971

For each age, sex, and race subgroup, and for each survey date between 1966 and 1971, the proportion highly satisfied is disaggregated by occupation, industry, and average hourly earnings in Tables 3.3 and 3.4. Among occupational categories, as virtually all previous studies have also shown (Quinn et al., 1974), professional-technical workers and managers, officials, and proprietors appeared to be most highly satisfied with their jobs while operatives and laborers generally were among the least satisfied. Clerical jobs also were attractive to women, as were sales positions to all but younger workers.

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[12] Although the data presented in Tables 3.1 and 3.2 are for a six-year period, 1966-1972, data for each of the cohorts pertain at most to only a five-year interval. For the older men and women the data actually pertain to the 1966-1971 and 1967-1972 periods respectively. For the younger cohorts the data pertain to the 1966-1970 period for males and to the 1968-1971 period for females.

[13] See, for example: Strauss (1974); Work in America (1972); and Sheppard and Herrick (1972).

[14] See Quinn et al. (1974) for a summary of 15 national surveys conducted between 1958 and 1973 to examine levels and trends in job satisfaction.

With the exception of the middle-aged men, racial differences in assignment to broad occupational categories do not account entirely for the racial differences in degree of job satisfaction observed in Tables 3.1 and 3.2. Particularly among craftsmen, operatives, and laborers in the case of male youth, and among clerical workers and operatives in the case of women, racial differences in the proportion of workers highly satisfied with their jobs tend to persist. Nor may the age and sex differences in degree of job satisfaction observed in Tables 3.1 and 3.2 be explained entirely in terms of age and sex differences in the occupational distribution. Among professional-technical workers, clerical workers, and sales workers, for example, older workers, relative to youth, are consistently above-average in reporting themselves highly satisfied.

Within the major blue collar and service occupational categories, only young black men consistently show a lesser tendency than their older counterparts to report themselves as highly satisfied with their jobs. There is little evidence among white males that young craftsmen, operatives, laborers, farm workers, or service workers were any less likely to be highly satisfied with their jobs during the period than their older counterparts. There are substantial sex differences, however, within every major occupational category in the proportion who were highly satisfied.

It should be kept in mind in interpreting these data that age, sex, and race differences in assignment to broad occupational categories clearly do not capture all of the differences in occupations and other aspects of labor market experience between young and old, men and women, whites and blacks. It is both possible and likely that there is as much variation in the quality of employment situations within these broad major occupational categories as among them. More subtle occupational differences thus may account for age, sex, and race differences in job satisfaction.

The data in Tables 3.3 and 3.4 also demonstrate that the consistent downward trends in job satisfaction observed earlier are due more to trends within certain occupations than to downward trends within all major occupations.[15]

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[15] While this holds true for the four NLS cohorts as a whole, it is not universally true within each of the eight age-sex-race groups. Of the two exceptions, the first is the case of white middle-aged men where a decline in the proportion highly satisfied with their jobs occurred within every major occupational category. Among black young men, however, no downward trend in job satisfaction is observed within any of the six occupational categories for which sufficient sample cases permit analysis.

TABLE 3.3

PROPORTION HIGHLY SATISFIED WITH THEIR JOBS AMONG MEN, 1966-1971, BY RACE, OCCUPATION, INDUSTRY, AND WAGE RATES

(Sample size)

	Men						Young Men			
	Whites			Blacks			Whites		Blacks	
	1966	1969	1971	1966	1969	1971	1966	1969	1966	1969
Occupation										
Professional, technical and kindred	71.3 (349)	71.4 (296)	66.6 (261)	90.9 (39)	73.0 (35)	82.7 (33)	63.3 (108)	55.1 (199)	59.3 (10)	37.0 (13)
Managers, officials, and proprietors	71.4 (562)	67.8 (474)	61.1 (437)	59.2 (41)	63.5 (32)	49.1 (29)	63.9 (53)	73.2 (64)	a	a
Clerical and kindred	58.2 (162)	52.6 (143)	45.9 (127)	60.5 (54)	57.3 (51)	42.1 (42)	44.9 (113)	55.5 (171)	42.1 (36)	41.3 (42)
Sales workers	68.0 (172)	66.0 (139)	59.7 (128)	a	a	a	61.2 (57)	41.4 (169)	a	a
Craftsmen, foremen, and kindred	53.9 (819)	52.6 (669)	41.2 (623)	53.3 (171)	55.2 (152)	50.0 (132)	61.6 (265)	57.1 (290)	44.3 (55)	50.7 (56)
Operatives and kindred	45.7 (560)	42.1 (475)	34.0 (440)	49.8 (341)	46.7 (287)	47.9 (255)	43.7 (420)	47.7 (490)	32.4 (166)	34.4 (171)
Private household workers	a	a	a	a	a	a	a	a	a	a
Service workers (except for private household)	51.0 (166)	41.5 (142)	42.6 (130)	56.6 (166)	51.4 (134)	59.9 (118)	56.4 (61)	43.6 (190)	42.0 (68)	43.3 (125)
Farmers and farm managers	55.4 (249)	48.7 (224)	44.9 (213)	53.4 (58)	48.6 (46)	42.1 (43)	84.0 (26)	67.2 (25)	a	a
Farm laborers and foremen	43.4 (56)	46.2 (44)	32.4 (40)	27.6 (76)	44.8 (66)	35.8 (54)	47.3 (46)	46.6 (167)	20.8 (59)	34.2 (111)
Nonfarm laborers	46.0 (149)	40.0 (118)	35.2 (102)	45.8 (261)	51.6 (206)	48.7 (175)	35.2 (120)	46.3 (303)	24.9 (103)	30.8 (138)
Armed forces	a	a	a	a	a	a	a	a	a	a
Industry										
Agriculture, forestry, and fisheries	54.9 (325)	48.7 (287)	43.4 (271)	37.9 (147)	47.5 (122)	41.1 (105)	54.6 (84)	49.4 (213)	21.2 (75)	36.4 (127)
Mining	48.3 (30)	34.6 (30)	41.9 (25)	a	a	a	a	a	a	a
Construction	62.3 (346)	54.3 (265)	44.3 (237)	47.9 (153)	58.6 (123)	45.4 (99)	58.3 (128)	58.8 (183)	26.1 (49)	31.0 (56)
Manufacturing	50.7 (987)	51.0 (820)	42.3 (765)	51.3 (358)	44.0 (307)	48.5 (270)	47.7 (514)	47.1 (601)	35.6 (178)	34.1 (172)
Transportation, communication, public utilities	55.8 (311)	52.9 (263)	39.4 (289)	56.2 (140)	65.9 (109)	56.7 (102)	60.3 (79)	65.4 (98)	17.7 (29)	40.2 (35)
Wholesale and retail trades	62.9 (496)	57.5 (418)	53.3 (389)	51.1 (125)	53.9 (105)	53.2 (83)	46.7 (240)	48.1 (509)	36.8 (92)	38.9 (135)
Finance, insurance, and real estate	70.1 (126)	68.6 (103)	66.2 (93)	50.2 (28)	a	a	a	58.1 (37)	a	a
Business and repair services	61.0 (105)	57.4 (95)	58.5 (88)	52.1 (30)	53.1 (26)	50.0 (25)	58.3 (64)	54.4 (89)	a	a
Personal services	48.0 (54)	42.3 (46)	41.4 (38)	36.5 (47)	46.1 (34)	37.2 (30)	a	31.9 (78)	54.5 (13)	47.2 (46)
Entertainment and recreation	a	a	a	a	a	a	a	50.8 (44)	a	a
Professional and related services	70.0 (240)	68.8 (199)	60.8 (185)	69.9 (88)	56.1 (77)	64.1 (71)	59.4 (69)	57.7 (166)	31.8 (33)	43.6 (60)
Public administration	60.0 (222)	57.8 (189)	47.1 (167)	60.0 (81)	51.3 (73)	48.7 (65)	59.0 (43)	52.7 (54)	a	a
Armed forces	a	a	a	a	a	a	a	a	a	a
Average hourly earnings										
Less than $1.60 per hour	55.2 (226)	46.1 (190)	42.8 (175)	41.6 (366)	46.6 (302)	40.8 (264)	40.7 (241)	50.3 (694)	30.3 (244)	39.4 (352)
$1.60 - $2.24 per hour	47.7 (314)	45.5 (254)	38.2 (234)	47.2 (202)	51.3 (163)	55.1 (148)	49.3 (318)	51.7 (411)	49.3 (104)	31.7 (95)
$2.25 - $3.24 per hour	50.3 (807)	46.4 (663)	41.3 (612)	63.4 (304)	53.1 (264)	56.8 (221)	53.7 (428)	51.4 (453)	30.2 (78)	36.2 (77)
$3.25+ per hour	65.4 (1123)	63.2 (950)	52.2 (856)	56.0 (156)	55.0 (135)	55.3 (120)	57.7 (171)	53.2 (189)	45.8 (29)	33.3 (26)

[a] Proportion not shown where based on fewer than 25 observations.

TABLE 3.4

PROPORTION HIGHLY SATISFIED WITH THEIR JOBS AMONG WOMEN, 1967-1972, BY RACE, OCCUPATION, INDUSTRY, AND WAGE RATES

(Sample size)

	Women						Young Women			
	Whites			Blacks			Whites		Blacks	
	1967	1969	1971	1967	1969	1971	1968	1970	1968	1970
Occupation										
Professional, technical and kindred	84.0 (240)	80.3 (238)	73.0 (246)	85.6 (68)	82.5 (63)	73.4 (62)	68.8 (166)	61.3 (153)	64.2 (25)	50.0 (29)
Managers, officials, and proprietors	71.7 (88)	63.0 (78)	71.5 (74)	a	a	a	a	a	a	a
Clerical and kindred	70.7 (582)	68.1 (570)	68.7 (650)	58.5 (106)	55.7 (105)	65.6 (97)	66.2 (464)	56.6 (546)	57.4 (114)	43.0 (145)
Sales workers	67.3 (95)	65.3 (102)	62.1 (124)	a	a	a	45.2 (43)	54.3 (123)	a	a
Craftsmen, foremen, and kindred	a	a	a	a	a	a	a	a	a	a
Operatives and kindred	55.5 (292)	47.3 (283)	52.8 (298)	49.0 (160)	46.3 (153)	47.3 (145)	44.2 (186)	44.9 (141)	39.3 (71)	45.7 (61)
Private household workers	28.5 (36)	a	a	45.5 (209)	56.8 (180)	47.9 (177)	a a	52.5 (142)	27.9 (44)	58.1 (73)
Service workers (except for private household)	63.5 (235)	64.3 (198)	59.3 (211)	64.4 (215)	59.3 (209)	53.4 (195)	61.6 (123)	46.6 (237)	54.8 (77)	53.3 (105)
Farmers and farm managers	a	a	a	a	a	a	a	a	a	a
Farm laborers and foremen	50.3 (41)	30.6 (35)	45.9 (40)	18.9 (29)	a	a	a	a	a	a
Nonfarm laborers	a	a	a	a	a	a	a	a	a	a
Armed forces	a	a	a	a	a	a	a	a	a	a
Industry										
Agriculture, forestry, and fisheries	57.4 (54)	36.9 (44)	50.1 (54)	18.7 (35)	11.7 (25)	66.1 (25)	a	47.3 (29)	a	a
Mining	a	a	a	a	a	a	a	a	a	a
Construction	a	a	a	a	a	a	a	a	a	a
Manufacturing	61.6 (391)	56.5 (387)	58.7 (416)	50.0 (108)	46.8 (111)	48.4 (105)	55.4 (259)	48.8 (246)	50.3 (68)	54.3 (61)
Transportation, communication, public utilities	66.2 (61)	60.5 (69)	65.2 (73)	a	a	a	63.0 (66)	63.4 (69)	a	a
Wholesale and retail trades	65.0 (355)	62.5 (351)	64.9 (402)	46.5 (101)	57.6 (101)	50.1 (97)	57.0 (138)	50.2 (338)	44.7 (39)	45.2 (57)
Finance, insurance, and real estate	73.1 (86)	66.9 (86)	64.7 (100)	a	a	a	57.9 (93)	58.5 (89)	a	a
Business and repair services	69.2 (37)	62.5 (31)	62.3 (33)	a	a	a	a	39.6 (25)	a	a
Personal services	50.3 (120)	52.9 (90)	61.3 (98)	48.0 (300)	58.9 (258)	50.3 (252)	47.4 (77)	51.0 (208)	27.9 (69)	51.6 (105)
Entertainment and recreation	a	a	a	a	a	a	a	a	a	a
Professional and related services	79.5 (425)	78.8 (395)	72.2 (412)	78.1 (204)	68.0 (199)	69.2 (185)	72.6 (247)	57.6 (307)	69.5 (91)	51.4 (130)
Public administration	71.2 (71)	68.0 (61)	77.8 (64)	50.2 (39)	47.6 (35)	51.5 (33)	a	57.6 (61)	a	40.6 (33)
Armed forces	a	a	a	a	a	a	a	a	a	a
Average hourly earnings										
Less than $1.60 per hour	63.5 (386)	62.3 (324)	62.3 (331)	54.6 (394)	56.3 (346)	50.3 (321)	56.5 (192)	53.8 (512)	47.2 (119)	47.9 (197)
$1.60 - $2.24 per hour	67.7 (443)	62.4 (362)	65.0 (355)	52.5 (135)	57.6 (119)	53.8 (107)	60.3 (460)	52.6 (447)	54.6 (135)	46.3 (107)
$2.25 - $3.24 per hour	72.3 (406)	71.2 (331)	62.2 (332)	58.1 (107)	52.1 (97)	45.3 (93)	66.7 (230)	57.5 (186)	60.7 (42)	49.5 (34)
$3.25+ per hour	78.2 (116)	71.2 (103)	71.3 (104)	84.6 (33)	81.7 (28)	84.8 (27)	79.5 (31)	59.0 (31)	a	a

[a] Proportion not shown where based on fewer than 25 observations.

Perhaps the most important finding in this regard is that the consistent declines stem less from downward trends among semi-skilled and unskilled workers than from declines among skilled workers and white collar workers.

The most notable trend in job satisfaction is among professional and technical workers. With the single exception of young black men in professional-technical jobs, where insufficient sample cases preclude an estimate, the proportion of professional-technical workers highly satisfied declined systematically between 1966 and 1971 within each of the subgroups. Among managers, officials, and proprietors, the proportion highly satisfied also declined among white and black middle-aged men. Among younger white men and older white women however, the only other subgroups for which sufficient sample cases for managers are available, the proportion highly satisfied rose by nearly 10 percent in the former case, and declined and then rose again to its initial level in the latter case.

The job satisfaction of clerical workers declined considerably among both whites and blacks within the cohorts of middle-aged men and young women. Satisfaction also declined among sales workers in the cases of white men, white boys, and white women, and among craftsmen, farmers, and farm managers within 3 of the 4 subgroups of men. Only in the case of the middle-aged white men, however, was there a decline in job satisfaction among operatives or laborers. Among service workers job satisfaction declined among whites within each of the four NLS cohorts and among blacks within the older cohort of women.

Among the broad industrial categories examined in Tables 3.3 and 3.4, professional/related services, finance/insurance/real estate, business/repair services, public administration, and transportation/communication/utilities generally showed better than half their workers as highly satisfied with their jobs between 1966 and 1971. Racial differences in occupations within industries may partially account for the generally below average levels of job satisfaction among blacks in agriculture, construction, manufacturing, and in the wholesale and retail trades. Within age and race groups there are few cases where the proportion of women highly satisfied is systematically lower than the proportion of men. There are consistent age differences in job satisfaction within industrial categories, however, but generally only among blacks. The data suggest a tendency for younger blacks to be considerably less highly satisfied with their jobs than their older counterparts within the same industries.

As in the case of major occupational categories, downward trends in job satisfaction appear to be industry-specific rather than uniform among all of the broad industrial categories. Within professional and related services, for example, the proportion of workers highly satisfied declined among both whites and blacks in the NLS cohorts, with the exception of the male youth. Trends in job satisfaction within major industries appear to differ across the age-sex-race groups, however, perhaps as a function of age-sex-race differences in the quality of employment situations within industries and of age-sex-race differences in preferences and "tastes" for various types of work rewards.

Among the middle-aged men, job satisfaction declined within every major industrial category for whites, and within manufacturing, professional and related services, and public administration for blacks. Among young white men, the proportion highly satisfied declined in agriculture, business/repair services, and public administration, and increased in transportation and communication. Yet among black young men, the proportion expressing high job satisfaction increased in agriculture, construction, manufacturing, transportation/communication/public utilities, and in professional and related services.

Among working women, the most consistent patterns are in the personal services, where the proportion highly satisfied rose during the 1966-1971 period, and in professional and related services, where job satisfaction declined. Among older white women, the proportion highly satisfied also declined within agriculture, manufacturing, finance/insurance/real estate, and business/repair services, while it rose within public administration and in personal services. Among their black counterparts, however, aside from the patterns previously noted, only within agriculture is any pattern evident as the proportion highly satisfied rose more than three-fold between 1967 and 1971. Job satisfaction among the younger women also appears to have declined in manufacturing and in the wholesale and retail trades among the whites, and to have risen in manufacturing among the blacks.

Finally, the data in Tables 3.3 and 3.4 show that the proportion expressing high job satisfaction is related to wage rates. The relationship, however, is neither very strong nor consistently monotonic throughout the 1966-1971 period among the eight age-sex-race groups. The data also convincingly demonstrate that age-sex-race differences in wages account for very little of the age-sex-race differences in job satisfaction observed earlier. Nor may the declines in job satisfaction previously observed be attributed solely to decreased satisfaction among workers within the lowest paying types of employment. Even among those earning more than $3.25 per hour, the proportion highly satisfied declined during the period among whites within each of the four NLS cohorts, as well as among black young men.

V. POSSIBLE REASONS FOR DOWNTURN IN JOB SATISFACTION

The downturns in job satisfaction observed in Tables 3.1 and 3.2 may be linked to worker preferences and "tastes" for various types of work rewards, to the changing composition of the work force, or to the course of the business cycle. Proponents of the "quality of working lives" thesis maintain that a changing mood and a changing work ethic have occurred among many of the nation's workers, particularly among youth, women, minorities, and those who are recent entrants or reentrants to the work force.

Flanagan et al. (1974), however, posit that workers are not becoming increasingly dissatisfied with their jobs, but that the demographic composition of the work force has been changing such that those groups who have historically been dissatisfied with work now comprise a greater proportion of the labor force than they did in the past. The fact that women, youth, and minorities generally tend to be segregated into less satisfying jobs and often to experience wage discrimination even when not occupationally segregated is thought to account for this greater dissatisfaction. Hence, according to Flanagan et al. (1974, p. 102), preferences of workers for more "meaningful" jobs have not increased, or at least they have not outstripped the ability of the labor market to adjust to changing preferences:

> Although there is little evidence of change in attitudes toward work among members of any specific demographic group, the number of young, black, and female workers has increased faster than other segments of the work force, and since these groups are relatively dissatisfied, their growing importance may have depressed satisfaction as a whole.

The increased economic uncertainty which occurred during the 1966-1972 period, the erosion of the purchasing power of the dollar, and the failure of real earnings to continue the rapid rise experienced at the beginning of the period, may also have affected job satisfaction of workers. In addition, parts of the period, particularly after 1969, were marked by both loose labor markets and stubborn inflation.

Changes in the Composition of the Work Force

In Tables 3.1 and 3.2, age, sex, and race differences in the proportion highly satisfied are consistently observed. Youth and blacks are less likely to be highly satisfied than older workers and whites, and women tend to be more highly satisfied than men. The effect of the changing demographic composition of the work force on levels of job satisfaction for the entire labor force thus depends upon the extent to which these opposing forces offset one another. The heavy inflows of youth and blacks into the work force during the recent past[16] should clearly have exerted a downward influence on job satisfaction for the work force as a whole. Similarly, the secularly declining labor force participation rates of older male workers[17] operates to depress levels of job satisfaction even further. To some extent, however, these tendencies should have been offset by the influx of women into the work force,[18] and by a self-selection process whereby dissatisfied workers disproportionately tend to retire early (Parnes et al., 1975a).

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[16] See: 1976 Employment and Training Report of the President, Table A-3, pp. 215-216.

[17] See: 1976 Employment and Training Report of the President, Table A-2, p. 214.

[18] See: 1976 Employment and Training Report of the President, Table A-3, pp. 215-216.

When considering the proportions "satisfied," relative to those "highly satisfied," the implications of demographic changes in the composition of the work force become clearer. Consistent with the findings of Quinn et al. (1974), women tend to differ only minimally from men in the proportion who are "satisfied" with their jobs, while youth and blacks are below-average in this regard (Tables 3.1 and 3.2). The changing composition of the work force then tends to result in reduced levels of job satisfaction for the work force as a whole. The fact that the data of Quinn et al. (1974) for the entire work force do not demonstrate such a downward trend in the proportion of workers who are "satisfied" suggests that the influence of these demographic changes on job satisfaction has been offset by other factors, such as job improvement.[19]

Tables 3.5 and 3.6 report the response patterns of the four NLS cohorts to the job satisfaction question with the sample restricted to only those employed at each survey date. Since Tables 3.1 and 3.2 include for each year those workers who were employed at the particular survey date in question, while Tables 3.5 and 3.6 include only those employed at every survey date, any differences between the former and the latter should reflect the influence of entry, reentry, and withdrawals from the work force on job satisfaction.

Among youth and women, movements into the work force during the period clearly predominate, while withdrawals from the work force characterize the predominant movements among middle-aged men. The data clearly reveal that movements into and out of the work force during the period within the four NLS cohorts had little effect on the declines in levels of job satisfaction previously observed (Tables 3.1 and 3.2), and that declines in job satisfaction within each of these cohorts are even more systematic among those workers employed throughout the entire period. Among those employed at every survey date, the proportion highly satisfied declined by 12-13 percent among white middle-aged men, white and black women in their thirties and forties, and among young black women, and by 5 percent among black middle-aged men and white youth.

The only exception to this pattern, as was also the case in Tables 3.1 and 3.2, is among black young men where job attitudes of those employed throughout the period rose monotonically from 35 percent highly satisfied in 1966 to 44 percent in 1970. Individuals within these cohorts, particularly among those in the older cohorts of men and women, changed their attitudes toward their jobs between 1966 and 1972, becoming less satisfied during the period. Movements into and out of the work force during the period tended to obscure slightly these consistently downward trends.

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[19] Quinn et al. (1974, pp. 7-8) consider the following to be reflective of trends in job improvement: (1) secular increases in real wages and fringe benefits, (2) federal and state legislation for improved occupational safety and health, (3) increased automation providing workers with machines over which they have control, and (4) increased managerial attention to the human needs of workers.

TABLE 3.5

DEGREE OF JOB SATISFACTION AMONG MEN, 1966-1971, BY AGE AND RACE[a]

(Percentage Distribution)

Degree of job satisfaction	Whites						Blacks					
	1966	1967	1968	1969	1970	1971	1966	1967	1968	1969	1970	1971
Men 45-59 years of age in 1966												
Number of respondents	2,185	2,185	b	2,185	b	2,185	746	746	b	746	b	746
Total percent	100.0	100.0	b	100.0	b	100.0	100.0	100.0	b	100.0	b	100.0
Highly satisfied	58.9	57.5	b	54.8	b	46.9	55.1	54.1	b	54.4	b	50.1
Somewhat satisfied	34.9	36.0	b	39.3	b	45.1	38.7	40.5	b	40.7	b	45.6
Somewhat dissatisfied	4.4	4.5	b	4.4	b	6.5	4.1	3.5	b	3.4	b	2.9
Highly dissatisfied	1.8	2.0	b	1.6	b	1.5	2.2	1.9	b	1.5	b	1.4
Men 14-24 years of age in 1966												
Number of respondents	848	b	b	848	848	b	289	b	b	289	289	b
Total percent	100.0	100.0	100.0	100.0	100.0	b	100.0	100.0	100.0	100.0	100.0	b
Highly satisfied	54.8	b	b	54.8	50.0	b	35.1	b	b	38.5	44.1	b
Somewhat satisfied	36.2	b	b	39.0	42.5	b	53.6	b	b	50.7	43.1	b
Somewhat dissatisfied	5.5	b	b	4.8	6.0	b	8.4	b	b	8.7	8.1	b
Highly dissatisfied	1.5	b	b	1.5	1.6	b	2.9	b	b	2.2	4.7	b

[a] Sample includes respondents employed and not enrolled in school at each survey date.

[b] Data were not available.

TABLE 3.6

DEGREE OF JOB SATISFACTION AMONG WOMEN, 1967-1972, BY AGE AND RACE[a]

(Percentage Distribution)

Degree of job satisfaction	Whites 1967	Whites 1968	Whites 1969	Whites 1970	Whites 1971	Whites 1972	Blacks 1967	Blacks 1968	Blacks 1969	Blacks 1970	Blacks 1971	Blacks 1972
Women 30-44 years of age in 1967												
Number of respondents	915	b	915	b	915	915	452	b	452	b	452	452
Total percent	100.0	b	100.0	b	100.0	100.0	100.0	b	100.0	b	100.0	100.0
Highly satisfied	69.8	b	67.3	b	64.6	57.5	59.9	b	55.9	b	53.3	47.0
Somewhat satisfied	26.7	b	27.9	b	29.7	35.4	33.4	b	40.3	b	42.3	45.5
Somewhat dissatisfied	2.4	b	3.0	b	4.6	5.4	4.9	b	2.7	b	3.7	5.1
Highly dissatisfied	1.2	b	1.7	b	1.1	1.8	1.8	b	1.1	b	0.8	2.4
Women 14-24 years of age in 1968												
Number of respondents	b	395	395	395	395	b	b	121	121	121	121	b
Total percent	b	100.0	100.0	100.0	100.0	b	b	100.0	100.0	100.0	100.0	b
Highly satisfied	b	62.7	64.7	59.4	58.0	b	b	57.8	61.4	45.3	45.7	b
Somewhat satisfied	b	28.2	31.2	34.3	36.6	b	b	33.7	31.8	48.6	40.4	b
Somewhat dissatisfied	b	5.1	2.9	4.4	3.9	b	b	5.7	4.8	4.8	9.5	b
Highly dissatisfied	b	4.1	1.2	2.0	1.4	b	b	2.8	1.9	1.2	4.3	b

[a] Sample includes respondents employed and not enrolled in school at each survey date.
[b] Data were not available.

Changes in Worker Preferences and Tastes

Information about what workers like and dislike in their jobs should be useful to corporate and public policy makers in creating conditions that will effectively tap the productive efforts of workers while satisfying their varied wants. According to those who maintain that a changing work ethic is emerging, particularly among youth, women, and minorities, the preferences of a more affluent and better educated work force are supposedly becoming more "intrinsic" in character.[20] Those who challenge this thesis, however, contend that worker demands still focus primarily on such traditional "bread and butter" items as higher wages, greater job security, shorter hours, earlier retirements, and greater attention to occupational safety and health.[21] These critics further contend that the recommendations of proponents of this thesis do not serve the interests of workers and, although well-intentioned, may actually be "speed ups" in disguise, undesired by workers, and excessively expensive to management.[22]

Table 3.7 presents by age and race the first responses of males in the NLS cohorts to the following question: "What are the things you like best about your job?" For the middle-aged men this question was asked in 1966 and in 1971, and in 1966 and 1970 for the male youth. The identical question was also asked in 1967 and in 1972 of the older women, and in 1968 and 1971 of the younger women. The first responses of the NLS women to this question are presented by age and race in Table 3.8. Additionally, Tables 3.9 and 3.10 present the first responses of the four NLS cohorts to the companion question: "What are the things about your job that you don't like so well?"

With respect to the aspects of jobs liked best by workers, there are increases of 3 to 7 percentage points in the proportion reporting an "intrinsic" aspect of their work as the job facet liked best within five of the subgroups. Among young black men and older black women, however, the proportion reporting an intrinsic job facet as the aspect of their job liked best declined during the period by from 3 to 10 percentage points. Among the specific job facets there are remarkably few changes of even 3 percent in response patterns within any of the groups.

Concerning the aspects of jobs disliked most by workers, more consistent shifts in preferences during the period are evident. Among whites and blacks

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[20] Intrinsic factors, as defined earlier in the chapter, refer to aspects of work which stem from the job content rather than job context. Meaningful work, interesting work, and opportunities for psychological growth are examples of intrinsic aspects of work. See: Herzberg (1966) and Herzberg et al. (1959) for further discussion of this distinction. Also see Chapters I and VII of this volume.

[21] Strauss (1974).

[22] *Ibid*.

TABLE 3.7

ASPECT OF WORK LIKED BEST BY MEN, 1966-1971, BY AGE AND RACE[a]

(Percentage Distribution)

Aspect of work liked best	Middle-Aged Men				Young Men			
	Whites		Blacks		Whites		Blacks	
	1966	1971	1966	1971	1966	1970	1966	1970
Number of respondents	3,152	2,351	1,166	813	1,232	1,865	489	661
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic								
The work itself	34.9	32.2	22.8	22.2	29.0	28.0	26.9	20.2
Capacity to do work	3.7	4.4	9.2	9.3	6.9	4.6	9.8	6.2
Responsibility or independence	13.7	14.8	5.6	10.7	8.4	13.2	4.1	5.1
Chance for advancement	0.0	0.2	0.3	0.0	1.4	1.5	0.8	1.6
Other intrinsic	2.1	6.1	2.2	4.9	9.4	9.3	9.5	8.3
Subtotal intrinsic	54.4	57.7	40.1	47.1	55.1	56.6	51.1	41.4
Extrinsic								
Earnings and fringes	10.9	10.2	15.7	12.0	12.7	11.1	12.4	10.9
Job security	3.9	3.0	5.2	4.8	0.9	1.4	1.0	3.1
Hours of work	4.6	4.4	5.4	4.6	6.3	5.0	5.9	8.4
Working conditions	5.2	2.8	5.8	3.5	3.0	4.7	2.5	2.9
Limited pressure	1.7	1.9	3.3	2.5	1.7	1.9	2.7	2.6
Supervision	2.4	1.7	6.6	6.8	3.1	2.1	4.0	3.6
Interpersonal relationships	11.3	11.4	8.0	10.9	10.8	11.4	7.8	10.9
Company policy and administration	2.2	1.4	4.7	2.4	2.1	1.5	3.5	2.0
Union	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Keeps me busy	0.4	1.0	0.4	0.1	0.3	0.5	0.3	0.8
Other extrinsic	1.3	1.7	1.5	2.3	2.6	0.9	3.1	2.5
Subtotal extrinsic	44.0	39.1	56.7	49.9	43.6	40.6	43.2	47.7
Unclassifiable	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0
Nothing	1.5	2.9	3.2	2.8	1.1	3.0	5.7	11.0

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[a] Sample includes respondents employed and not enrolled in school at the survey date in question.

TABLE 3.8

ASPECT OF WORK LIKED BEST BY WOMEN, 1967-1972, BY AGE AND RACE[a]

(Percentage Distribution)

Aspect of work liked best	Mature Women				Young Women			
	Whites		Blacks		Whites		Blacks	
	1967	1972	1967	1972	1968	1971	1968	1971
Number of respondents	1,619	1,633	809	681	936	1,304	323	494
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic								
The work itself	35.7	32.7	35.5	30.0	33.0	32.6	33.1	35.2
Capacity to do work	2.0	2.4	5.2	5.1	2.8	3.4	4.0	6.4
Responsibility or independence	4.7	8.2	3.9	4.4	5.1	5.2	2.3	1.1
Chance for advancement	0.1	0.3	0.1	0.6	0.5	2.2	0.5	1.8
Other intrinsic	4.1	5.8	4.6	5.8	4.4	7.0	6.1	5.2
Subtotal intrinsic	46.6	49.2	49.3	45.9	45.8	50.4	46.0	49.7
Extrinsic								
Earnings and fringes	6.6	6.1	4.9	7.7	7.2	8.1	9.2	13.5
Job security	0.2	0.5	0.3	1.4	0.4	0.2	0.4	0.2
Hours of work	5.4	7.0	6.3	6.1	4.0	7.7	4.2	5.1
Working conditions	2.5	2.9	2.4	2.5	3.5	3.1	3.4	2.3
Limited pressure	0.9	1.0	1.9	1.4	1.0	1.1	2.7	1.5
Supervision	4.0	2.7	11.1	6.3	4.0	2.2	5.4	2.0
Interpersonal relationships	24.5	22.6	11.4	16.4	27.4	23.5	18.5	19.7
Company policy and administration	1.4	1.9	1.4	2.5	1.3	1.1	0.6	0.4
Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Keeps me busy	0.8	0.7	0.1	0.2	0.8	0.4	0.3	0.2
Other extrinsic	4.1	3.9	4.2	4.3	2.6	0.3	1.9	1.0
Subtotal extrinsic	50.4	49.3	44.0	48.8	52.2	47.7	46.6	45.9
Unclassifiable	1.0	0.0	0.6	0.0	0.3	0.0	0.4	0.1
Nothing	1.8	1.5	6.3	5.2	1.7	1.6	7.0	4.2

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[a] Sample includes respondents employed and not enrolled in school at the survey date in question.

TABLE 3.9

ASPECT OF WORK DISLIKED MOST BY MEN, 1966-1971, BY AGE AND RACE[a]

(Percentage Distribution)

Aspect of work disliked most	Middle-Aged Men				Young Men			
	Whites		Blacks		Whites		Blacks	
	1966	1971	1966	1971	1966	1970	1966	1970
Number of respondents	3,152	2,351	1,166	813	1,232	1,865	489	661
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic								
The work itself	4.5	3.8	3.5	2.4	5.3	8.3	2.5	7.1
Work is difficult	3.0	3.4	5.5	4.6	2.4	2.1	5.9	4.6
No responsibility or independence	0.4	0.1	0.0	0.3	0.2	0.3	1.1	0.0
No chance for advancement	0.3	0.3	0.4	0.4	0.6	3.4	1.1	3.8
Other intrinsic	6.1	14.6	3.5	8.8	17.3	12.2	15.4	12.6
Subtotal intrinsic	14.3	22.2	12.9	16.5	25.8	26.3	26.0	28.1
Extrinsic								
Earnings and fringes	9.0	6.6	16.3	7.8	12.4	11.3	19.6	16.8
Job insecurity	1.9	1.1	2.9	1.3	1.2	1.2	2.1	0.9
Hours of work	12.4	8.4	8.6	5.4	13.3	12.4	8.6	7.3
Working conditions	9.1	4.6	7.9	3.2	3.8	5.5	3.4	3.8
Too much pressure	5.1	3.9	2.4	1.1	1.6	2.3	0.5	0.4
Supervision	2.0	1.9	1.1	1.5	3.3	3.2	2.4	2.0
Interpersonal relationships	1.5	1.2	0.8	0.2	1.5	1.6	1.2	1.4
Company policy and administration	2.7	3.1	1.2	2.2	3.1	4.0	2.7	2.5
Union	0.2	0.4	0.1	0.2	0.2	0.4	0.2	0.1
Not enough to do	0.3	0.4	0.5	0.2	0.7	0.5	0.1	0.1
Other extrinsic	5.2	3.4	4.6	3.3	7.7	1.1	6.0	0.8
Subtotal extrinsic	49.4	35.0	46.4	26.4	48.8	43.0	46.8	36.1
Unclassifiable	11.3	3.0	5.1	1.9	2.8	0.6	0.2	0.1
Nothing	24.9	39.9	35.8	55.1	22.7	29.6	26.9	35.9

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[a] Sample includes respondents employed and not enrolled in school at the survey date in question.

TABLE 3.10

ASPECT OF WORK DISLIKED MOST BY WOMEN, 1967-1972, BY AGE AND RACE[a]

(Percentage Distribution)

Aspect of work disliked most	Mature Women				Young women			
	Whites		Blacks		Whites		Blacks	
	1967	1972	1967	1972	1968	1971	1968	1971
Number of respondents	1,619	1,633	809	681	936	1,304	323	494
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic								
The work itself	3.8	3.7	5.0	3.7	9.2	10.5	6.2	6.4
Work is difficult	4.0	3.9	3.0	2.8	3.4	2.7	3.3	3.5
No responsibility or independence	0.2	0.1	0.0	0.2	0.6	0.2	0.0	0.1
No chance for advancement	0.3	0.2	0.5	0.1	0.8	3.3	1.2	3.0
Other intrinsic	13.5	18.8	11.0	16.9	9.7	15.1	8.2	7.5
Subtotal intrinsic	21.8	26.7	19.5	23.7	23.7	31.8	18.9	20.5
Extrinsic								
Earnings and fringes	6.7	6.9	14.4	10.5	8.2	9.4	11.8	10.1
Job insecurity	0.5	0.6	0.6	0.6	0.2	0.8	1.9	0.4
Hours of work	9.4	7.8	6.6	5.9	11.2	8.6	13.1	14.4
Working conditions	4.8	3.2	3.9	2.4	3.4	2.4	2.4	2.4
Too much pressure	4.1	4.7	1.6	1.0	4.1	4.1	3.1	1.4
Supervision	1.6	2.7	2.9	1.6	4.6	3.6	3.2	5.0
Interpersonal relationships	2.0	2.5	1.1	1.5	3.7	2.6	3.0	2.3
Company policy and administration	2.5	2.4	3.2	2.7	3.0	3.8	3.2	2.6
Union	0.1	0.3	0.2	0.2	0.0	0.2	0.0	0.1
Not enough to do	0.6	0.9	0.1	0.6	0.7	1.8	1.3	0.2
Other extrinsic	5.1	3.8	5.5	4.4	3.1	0.8	2.9	0.2
Subtotal extrinsic	37.4	35.8	40.1	34.4	42.2	38.1	45.5	38.4
Unclassifiable	4.1	0.2	1.7	0.0	1.2	0.1	1.2	0.1
Nothing	36.6	37.4	38.6	44.7	32.8	29.8	31.4	41.0

[a] Sample includes respondents employed and not enrolled in school at the survey date in question.

within the older cohorts of men and women, and among young white women, interest in intrinsic aspects of work increased from 3 to 8 percentage points. Within the other three groups, shifts in response were small, although in the same direction. In all groups with the exception of older white women, the proportion disliking an extrinsic aspect of work consistently declined. Thus, there is some reason to suspect that declines in job satisfaction are linked to an increased interest in intrinsic aspects of work and a decreased interest in extrinsic aspects. That the data are more consistent when workers were asked about the job aspects they disliked most, rather than liked best, may possibly stem from the fact that in the latter case preferences for intrinsic facets may not surface because of their virtual absence, or limited availability, in many lines of work.

The data concerning aspects of work disliked most are also of interest in several additional regards. Although job dissatisfaction generally increased during the 1966-1972 period among the NLS respondents, the proportion who responded that there was "nothing" about their job that they disliked increased during this period from 7 to 19 percentage points among all of the groups with the exception of white women. Furthermore, the proportion of workers who cited "bread and butter" issues as the most disliked job aspects did not rise at all during this period within any of the eight NLS groups. In fact, the proportion dissatisfied with their jobs because of traditional economic aspects of work actually declined during the 1966-1972 period within a number of the groups.

Changes in the State of the Economy

The extent to which the declines in the proportion of workers highly satisfied are linked to the state of the economy and course of the business cycle during the 1966 to 1972 period is examined in Table 3.11. Data concerning turnover rates among manufacturing workers, unemployment rates, and changes in the consumer price index during this period are presented here. Although each of these measures is a crude approximation of business conditions and the period is short, it is possible to explore any relationship between the movement of these indicators and the downward pattern in levels of job satisfaction reported earlier.

The patterns of separations and accessions during the 1966-1972 period provide some interesting insights into the dynamics of job dissatisfaction. While the proportion of workers who were highly satisfied declined within each of the NLS cohorts, particularly during the 1969-1972 period, and since job satisfaction exhibits a strong "net" association to subsequent turnover, there is no evidence in Table 3.11 of rising quit rates during this period among workers in manufacturing industries. Some evidence indicates that the looseness of the labor market may be linked to levels of job satisfaction since layoffs increased considerably and new hires declined after 1969. Furthermore, unemployment rates for men and women, whites and nonwhites, were considerably higher after 1969 than before 1969, and the pace of inflation during the entire period was high by historical standards.

TABLE 3.11

TURNOVER RATES[a], UNEMPLOYMENT RATES, AND CONSUMER PRICES: NATIONAL AVERAGES, 1966-1972

	Turnover rates per 100 employees					Unemployment rates					Consumer price index
	Seperations			Accessions			Men		Women		
Year	Total	Quits	Layoffs	Total	New hires	Total	Whites	Nonwhites	Whites	Nonwhites	
1966	4.6	2.6	1.2	5.0	3.8	3.8	2.8	6.3	4.3	8.6	97.2
1967	4.6	2.3	1.4	4.4	3.3	3.8	2.7	6.0	4.6	9.1	100.0
1968	4.6	2.5	1.2	4.6	3.5	3.6	2.6	5.6	4.3	8.3	104.2
1969	4.9	2.7	1.2	4.7	3.7	3.5	2.5	5.3	4.2	7.8	109.8
1970	4.8	2.1	1.8	4.0	2.8	4.9	4.0	7.3	5.4	9.3	116.3
1971	4.2	1.8	1.6	3.9	2.6	5.9	4.9	9.1	6.3	10.8	121.3
1972	4.2	2.2	1.1	4.4	3.3	5.6	4.5	8.9	5.9	11.3	125.3

Source: 1976 Employment and Training Report of the President: Table C10, p.305; Table A18, p.239; and Table G-6, p.362.

[a] Labor turnover rates per 100 employees in manufacturing industries.

The lack of evidence of rising quit rates during the period among manufacturing workers reinforces the notion that dissatisfaction leads to turnover when labor market conditions provide opportunities for advantageous job changing. While job satisfaction began to decline substantially during the early 1970's, labor markets were looser than during the 1965-1968 period. Had labor markets been as tight between 1969 and 1972 as they were between 1965 and 1968, declining levels of job satisfaction may possibly have led to increasing rates of labor mobility. Also, the fact that manufacturing is a highly unionized and declining industry in terms of employment, characterized by strong seniority systems, makes it less likely that job dissatisfaction would lead to turnover.

Another interesting aspect of these data is that levels of job satisfaction did not rise as labor market conditions and inflation became less favorable. According to psychological approaches to job satisfaction, a less favorable economic environment should generally lead to the objective realities of one's job being compared to less favorable benchmarks. The same level of rewards should look considerably better in a depressed economy than in a robust labor market, yet individuals within the NLS cohorts were on-average becoming less satisfied with their jobs as better opportunities clearly were becoming more scarce.

VI. CORRELATES OF LEVELS AND TRENDS IN JOB SATISFACTION

The relationship of levels and trends in job satisfaction to a number of personal, demographic, and job-related characteristics of NLS respondents has been examined by multiple regression analysis. The correlates of levels of job satisfaction have been determined by regression of a dependent variable assigned the value 1 if the respondent was highly satisfied and 0 otherwise on the personal, demographic, and job-related characteristics. Scores on the single-item job satisfaction measure at the beginning of the period have been subtracted from scores on the measure at the end of the period and regressed on the personal, demographic, and job-related characteristics in order to examine the correlates of changes in job satisfaction. It should be noted that the lower the score on this dependent variable the more highly satisfied the respondent became during the period; the higher the score, the more highly dissatisfied the respondent became.

For each of the age-sex-race groups, the personal, demographic, and job-related variables include: (1) annual earnings in the year prior to the beginning of the period, (2) change in annual earnings over the course of the period, (3) occupational status at the beginning of the period, (4) change in occupational status over the course of the period, (5) change of employer during the period, (6) weeks of unemployment reported during the period, (7) weeks out of the labor force during the period, (8) completion of formal occupational training prior to the beginning of the period, (9) completion of formal occupational training during the course of the period, (10) health status during the course of the period, (11) length of service with employer as of the beginning of the period, (12) work experience prior to the first survey date, (13) marital status during the course of the period, (14) region of residence at the beginning of the period, (15) city size, (16) geographic mobility during the course of the period, and (17) years of schooling.[23]

The results of these regressions are presented by race for each of the four NLS cohorts in Tables 3.12, 3.13, 3.14, and 3.15. The data show a remarkable inability of these personal, job-related, and demographic variables to explain either individual differences or changes in the degree of job satisfaction. The biggest surprise is the absence of consistent relationships between earnings and job satisfaction and between change of employer and job satisfaction. There is some evidence that only white middle-aged men with higher earnings at the beginning of the period, other things being equal, were more likely to be highly satisfied with their jobs at the end of the period. The evidence also suggests that those older black women with the highest earnings at the beginning of the period were below-average in job satisfaction at the end of the period and above-average in tendency to become increasingly dissatisfied during the period, other things being equal. Only in the cases of young white men and older black men is there any evidence that increased earnings during the period are related to above-average likelihoods of high job satisfaction or increased job satisfaction during the period.

With respect to changes of employer, the data suggest a systematic relationship to job satisfaction only for the young men after accounting for situational differences between movers and stayers. The young men who changed employers during the period, for example, were between 7 and 18 percentage points, depending upon race, more likely to be highly satisfied with their jobs at the end of the period than comparable male youth who did not change jobs. They also were above-average in tendency to be more highly satisfied with their jobs at the end of the period than at the beginning. Another noteworthy aspect of the relationship between job satisfaction and change of employer is evident for the data for black middle-aged men. Although voluntary job changers do not differ systematically in degree or in changes in job satisfaction from those who did not change employers during the period, involuntary job changers were above-average in tendency both to be highly satisfied and to have increased in job satisfaction during the period. The data thus suggest that it is neither earnings nor job changing that accounts for levels and trends in job satisfaction, but rather the factors that accompany earnings and job changing.

With few exceptions among the eight subgroups, those in the higher status occupations at the beginning of the period and those experiencing occupational promotions during the period were consistently more likely to be highly satisfied at the end of the period, as well as more likely to increase in job satisfaction during the period, regardless of their earnings experience. Among blacks, it is possible that an insufficient number in higher status jobs precluded the observance of more systematic relationships.

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[23] The measurement of each of these variables is detailed in Appendix A to this chapter.

TABLE 3.12

REGRESSION RESULTS--CORRELATES OF JOB SATISFACTION, 1971, AND CHANGE IN JOB SATISFACTION, 1966-1971, AMONG MIDDLE-AGED MEN BY RACE

(t-ratios)

Explanatory variable:	Whites: Job satisfaction[a], 1971	Whites: Change in job satisfaction, 1966-1971	Blacks: Job satisfaction[a], 1971	Blacks: Change in job satisfaction, 1966-1971
Earnings, 1965	1.0	-.006	1.6	-.024
	(3.16)***	(-1.56)	(1.37)	(-1.61)
Change in earnings, 1965-1970	.5	-.002	2.1	-.028
	(1.28)	(-0.51)	(2.29)**	(-2.46)**
Occupational status, 1966	.4	-.004	.0	.000
	(5.58)***	(-3.90)***	(0.25)	(0.37)
Change in occupational status, 1966-1971	.4	-.004	.1	-.002
	(4.29)***	(-3.37)***	(0.73)	(-1.04)
Voluntary change of employer, 1966-1971	.1	-.040	.1	-.016
	(0.04)	(-0.74)	(0.09)	(-0.17)
Involuntary change of employer, 1966-1971	1.6	.043	14.6	-.023
	(0.34)	(0.70)	(1.86)*	(-2.30)**
Weeks of unemployment, 1966-1971	.1	-.002	-.2	.000
	(0.50)	(-0.96)	(-1.00)	(0.08)
Weeks out of labor force, 1966-1971	.2	-.002	-.1	-.001
	(1.10)	(-0.83)	(-0.37)	(-0.40)
Training, 1966	-4.6	.040	9.0	-.101
	(-1.74)*	(1.16)	(1.77)*	(-1.57)
Training, 1966-1971	.0	.001	.3	-.003
	(0.14)	(1.10)	(1.58)	[illegible]
Health problem, 1966 and 1971	-.5	.073	-9.4	.228
	(-0.12)	(1.27)	(-1.14)	(2.18)**
Health problem, 1966 only	1.3	-.001	-.5	.150
	(0.30)	(-0.02)	(-0.07)	(1.49)
Health problem, 1971 only	-7.8	.094	6.5	-.090
	(-1.84)*	(1.70)	(0.86)	(-0.94)
Length of service, 2 thru 9 years	-10.6	.127	3.0	-.058
	(-2.50)**	(2.32)**	(0.43)	(-0.67)
Length of service, 10 thru 19 years	-16.9	.239	5.9	-.127
	(-3.83)***	(4.17)***	(0.86)	(-1.44)
Length of service, 20+ years	-16.8	.207	-1.5	-.042
	(-3.76)***	(3.58)***	(0.21)	(-0.46)
Age, 50-54	5.6	-.092	6.6	-.069
	(1.97)**	(-2.51)**	(1.42)	(-1.18)
Age, 55-59	8.3	-.117	19.3	-.213
	(2.48)**	(-2.69)***	(3.44)***	(-2.99)***
Not married, 1966-1971	3.8	-.034	-2.4	-.001
	(0.74)	(-0.51)	(-0.39)	(-0.02)
Not married, 1966 only	-3.8	.098	13.2	-.173
	(-0.30)	(0.59)	(0.90)	(-0.93)
Not married, 1971 only	9.4	-.090	2.2	-.006
	(1.22)	(-0.90)	(0.28)	(-0.06)
South, 1966	2.5	-.034	.4	-.027
	(0.88)	(-0.93)	(0.09)	(-0.44)
Medium-size city, 1966	2.9	-.039	-4.8	.055
	(0.96)	(-1.00)	(-0.65)	(0.59)
Large urban area, 1966	3.4	-.033	8.8	-.023
	(1.05)	(-0.80)	(1.66)*	(-0.34)
Geographic mobility, 1966-1971	14.0	.183	42.1	-.444
	(2.54)**	(-2.57)***	(2.99)***	(-2.48)**
Education, 9 thru 11 years	-1.6	-.011	.3	-.063
	(-0.46)	(-0.25)	(0.06)	(-0.89)
Education, 12 years	-2.0	.010	-7.8	.069
	(-0.55)	(0.22)	(-1.16)	(0.81)
Education, 13+ years	2.7	-.048	5.6	.010
	(0.59)	(-0.81)	(0.52)	(0.07)
Constant	26.3	1.37	19.6	1.69
	(4.79)***	(16.82)***	(2.00)**	(11.89)***
$\bar{R}^2$	0.10	0.41	0.09	0.49
F-ratio	5.90***	36.28***	2.06***	19.16***
Number of sample cases	1,525	1,525	620	620

[a] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as percentage point differentials in the dependent variable associated with a 1 point difference in an explanatory variable.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3.13

REGRESSION RESULTS--CORRELATES OF JOB SATISFACTION, 1969, AND CHANGE IN JOB SATISFACTION, 1966-1969, AMONG YOUNG MEN BY RACE

(t-ratios)

	Whites		Blacks	
Explanatory variable:	Job satisfaction,[a] 1969	Change in job satisfaction, 1966-1969	Job satisfaction,[a] 1969	Change in job satisfaction, 1966-1969
Earnings, 1965	-1.0	.014	-3.8	.024
	(-0.98)	(1.09)	(-1.60)	(0.61)
Change in earnings, 1965-1968	1.5	-.017	1.4	-.025
	(2.37)**	(-2.01)**	(0.75)	(-0.88)
Occupational status, 1966	.5	-.007	.7	-.007
	(3.89)***	(-4.47)***	(2.10)**	(-1.39)
Change in occupational status, 1966-1969	.5	-.007	.5	-.010
	(4.39)***	(-4.66)***	(1.90)*	(-2.33)**
Change of employer, 1966-1969	6.9	-.147	17.5	-.188
	(1.75)*	(-2.76)***	(2.46)**	(-1.64)*
Weeks of unemployment, 1966-1969	-.4	.008	-.9	.009
	(-1.16)	(1.98)**	(-2.22)**	(1.33)
Weeks out of labor force, 1966-1969	-.3	.002	.1	-.004
	(-1.35)	(0.90)	(0.22)	(-0.81)
Training, 1966	-2.9	.039	-5.4	-.082
	(-0.74)	(0.75)	(-0.62)	(-0.59)
Training, 1966-1969	.1	-.001	.0	.001
	(1.43)	(-1.42)	(0.22)	(0.94)
Health problem, 1966 and 1969	-22.3	.142	-39.4	.642
	(2.08)**	(1.00)	(-1.89)*	(1.91)*
Health problem, 1966 only	-14.0	.100	-18.7	.246
	(-2.16)**	(1.16)	(-1.27)	(1.03)
Health problem, 1969 only	.6	-.095	-22.8	.491
	(0.06)	(-0.69)	(-1.00)	(1.34)
Length of service, 1966	.2	-.001	1.5	-.014
	(0.22)	(-0.11)	(0.82)	(-0.46)
Years of work experience, 1966	.9	-.012	-.4	.005
	(0.91)	(-0.89)	(-0.30)	(0.20)
Not married, 1966-1969	-5.0	.064	-7.8	.173
	(-0.92)	(0.87)	(-0.98)	(1.35)
Not married, 1966 only	-4.9	.089	-6.6	-.016
	(-1.04)	(1.41)	(-0.72)	(-0.11)
Not married, 1969 only	-7.2	-.039	-19.6	.147
	(-0.79)	(-0.32)	(-1.57)	(0.73)
South, 1966	11.4	-.102	22.4	-.281
	(2.77)***	(-1.85)*	(2.38)**	(-1.80)*
Medium-size city, 1966	-3.9	.081	12.0	-.195
	(-0.94)	(1.46)	(1.07)	(-1.07)
Large urban area, 1966	6.5	-.021	4.9	.122
	(1.39)	(-0.34)	(0.61)	(0.94)
Geographic mobility, 1966-1969	-5.5	.032	-7.1	.118
	(-1.30)	(0.57)	(-0.76)	(0.79)
Education, 9 thru 11 tears	-4.2	.068	-8.0	.057
	(-0.58)	(0.71)	(-0.73)	(0.32)
Education, 12 years	-5.7	.069	3.6	-.091
	(-0.72)	(0.67)	(0.28)	(-0.45)
Education, 13+ years	-7.5	.108	-2.5	-.275
	(-0.78)	(0.84)	(-0.13)	(-0.92)
Constant	45.0	1.506	33.5	1.732
	(3.40)***	(8.10)***	(1.33)	(3.82)***
$\bar{R}^2$	0.11	0.48	0.20	0.52
F-ratio	3.63***	27.65***	2.38***	10.11***
Number of sample cases	764	764	260	260

[a] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as percentage point differentials in the dependent variable associated with a 1-point difference in an explanatory variable.

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3.14

REGRESSION RESULTS--CORRELATES OF JOB SATISFACTION, 1971, AND CHANGE IN JOB SATISFACTION, 1967-1971, AMONG MATURE WOMEN BY RACE

(t-ratios)

	Whites		Blacks	
Explanatory variable:	Job satisfaction,[a] 1971	Change in job satisfaction, 1967-1971	Job satisfaction,[a] 1971	Change in job satisfaction, 1967-1971
Earnings, 1966	-1.19 (-1.20)	.016 (1.25)	-3.05 (-1.70)*	.042 (1.89)*
Change in earnings, 1966-1970	-1.01 (-1.87)*	.011 (1.56)	.48 (0.34)	-.022 (-1.24)
Occupational status, 1967	.57 (5.02)***	-.005 (-3.62)***	.41 (2.11)**	-.005 (-1.86)*
Change in Occupational Status, 1967-1971	.51 (3.53)***	-.006 (-2.98)***	-.01 (-0.04)	-.003 (-0.99)
Change of employer 1967-1971	-3.58 (-0.92)	.014 (0.28)	1.19 (0.22)	-.051 (-0.74)
Weeks of unemployment, 1967-1971	-.40 (-2.11)**	.007 (2.85)***	-.35 (-1.30)	.006 (1.99)**
Weeks out of labor force, 1967-1971	-.07 (-0.77)	.003 (0.23)	.10 (0.69)	-.000 (-0.11)
Training, 1967	-.12 (-0.03)	.012 (0.24)	12.38 (2.01)**	-.186 (-2.42)**
Training, 1967-1971	-.00 (-0.11)	-.003 (-0.53)	.05 (0.96)	-.000 (-0.39)
Health problem, 1967 and 1971	-1.10 (-0.14)	.021 (0.21)	3.07 (0.21)	-.087 (-0.49)
Health problem, 1967 only	.00 (0.00)	.000 (0.00)	.00 (0.00)	.000 (0.00)
Health problem, 1971 only	-11.43 (-1.19)	-.000 (-0.00)	-9.21 (-0.98)	-.043 (-0.37)
Length of service, 1967	-.12 (-0.31)	-.001 (-0.14)	-.16 (-0.35)	.004 (0.64)
Work experience, 1967	.00 (0.01)	.000 (0.03)	.56 (1.37)	-.006 (-1.24)
Age 35-39	-3.32 (-0.76)	.077 (1.38)	-3.25 (-0.54)	.011 (0.14)
Age 40-44	-1.09 (-0.24)	.015 (0.25)	1.30 (0.20)	-.079 (-0.97)
Not married, with child, 1967	10.97 (1.79)*	-.107 (-1.36)	-1.99 (-0.17)	.012 (0.15)
Married, with child, 1967	2.66 (0.42)	-.057 (-0.71)	13.96 (1.77)*	-.176 (-1.78)*
Married, without child, 1967	5.12 (0.68)	-.024 (-0.26)	-16.93 (-1.53)	.187 (1.36)
Married during period	2.27 (0.47)	-.032 (-0.51)	5.08 (0.83)	-.045 (-0.59)
Separated, divorced, or widowed during period	-6.68 (-0.48)	.051 (0.27)	-31.26 (-2.27)**	.330 (1.94)*
Married, with child during period	8.61 (0.75)	-.131 (-0.90)	-17.71 (-1.17)	.157 (0.84)
South, 1967	2.45 (0.66)	-.027 (-0.56)	8.59 (1.53)	-.069 (-0.98)
Medium-size city, 1967	-10.28 (-2.58)***	.092 (1.62)	15.75 (2.52)***	-.102 (-1.31)
Large urban area, 1967	-8.98 (-2.01)**	.135 (2.66)***	-3.65 (-0.45)	.064 (0.64)
Geographic mobility, 1967	1.54 (0.23)	.025 (0.29)	5.36 (0.47)	-.080 (-0.57)
Education, 9 thru 11 years	.46 (0.07)	.014 (0.17)	-7.14 (-1.09)	.049 (0.60)
Education, 12 years	1.24 (0.19)	-.051 (-0.61)	0.74 (0.10)	-.007 (-0.08)
Education, 13+ years	1.06 (0.13)	.290 (0.29)	2.79 (0.25)	-.052 (-0.38)
Constant	47.08 (4.74)***	1.24 (8.84)***	19.55 (1.59)	1.69 (9.93)***
$\bar{R}^2$	0.08	0.38	0.13	0.54
F-ratio	2.38**	16.31***	2.22**	16.85***
Number of sample cases	844	844	457	457

[a] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as percentage point differentials in the dependent variable associated with a 1 point difference in an explanatory variable.

*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).

TABLE 3.15

REGRESSION RESULTS--CORRELATES OF JOB SATISFACTION, 1970, AND CHANGE IN JOB SATISFACTION, 1968-1970, AMONG YOUNG WOMEN BY RACE

(t-ratios)

Explanatory variable:	Whites: Job satisfaction,[a] 1970	Whites: Change in job satisfaction, 1968-1970	Blacks: Job satisfaction,[a] 1970	Blacks: Change in job satisfaction, 1968-1970
Earnings, 1967	1.11 (0.60)	- .019 (-0.76)	2.66 (0.68)	- .043 (-0.77)
Change in earnings, 1967-1969	.23 (0.15)	- .010 (-0.49)	4.63 (1.54)	- .057 (-1.29)
Occupational status, 1968-1970	.43 (2.78)***	-.003 (-1.64)*	-.24 (-0.88)	.004 (1.04)
Change in occupational status, 1968-1970	.68 (3.97)***	-.008 (-3.55)***	.20 (0.66)	-.007 (-1.55)
Change of employer, 1968-1970	7.11 (1.44)	-.091 (-1.35)	-4.74 (-0.51)	.216 (1.59)
Weeks of unemployment, 1968-1970	-.15 (-0.29)	-.003 (-0.48)	-.34 (-0.64)	-.002 (-0.21)
Weeks out of labor force, 1968-1970	-.13 (-0.76)	-.002 (-0.83)	.45 (1.83)*	-.006 (-1.63)
Training, 1968	3.43 (0.77)	-.054 (-0.92)	.97 (0.12)	-.071 (-0.60)
Training, 1968-1970	.05 (1.15)	-.001 (-1.20)	.08 (1.02)	-.002 (-1.57)
Health problem, 1968 and 1970	-17.68 (-1.18)	.140 (0.70)	.00 (0.00)	-.000 (0.00)
Health problem, 1968 only	.86 (0.07)	.035 (0.21)	5.44 (0.28)	-.104 (-0.37)
Health problem, 1970 only	.23 (0.02)	.090 (0.56)	-28.39 (-1.38)	.417 (1.41)
Length of service, 1968	-.63 (-0.37)	.006 (0.27)	.76 (0.28)	.019 (0.50)
Years of work experience, 1968	1.04 (0.80)	-.014 (-0.83)	-1.90 (-0.88)	.019 (0.60)
Married during period	-1.32 (-0.25)	.026 (0.38)	27.44 (2.46)**	-.382 (-2.37)**
Married with child during period	-6.17 (-0.76)	-.036 (-0.33)	25.74 (1.92)*	-.311 (-1.76)*
South, 1968	1.15 (0.24)	-.099 (-1.54)	21.74 (2.53)***	-.334 (-2.71)***
Medium-size city, 1968	.54 (0.10)	-.029 (-0.39)	3.45 (0.35)	-.027 (-0.19)
Large urban area, 1968	4.16 (0.81)	-.021 (-0.31)	1.14 (0.08)	-.072 (-0.39)
Geographic mobility, 1968-1970	-10.62 (-1.84)*	.187 (2.42)**	-34.70 (-2.84)***	.334 (1.91)*
Education, 9 thru 11 years	-.41 (-0.03)	-.005 (-0.03)	4.93 (0.28)	-.315 (-1.23)
Education, 12 years	-12.27 (-0.85)	.059 (0.30)	9.81 (0.53)	-.276 (-1.03)
Education, 13+ years	-16.83 (-1.07)	.088 (0.42)	20.78 (0.92)	-.506 (-1.57)
Constant	41.28 (2.40)***	1.54 (6.35)***	16.31 (0.64)	2.14 (5.70)***
$\bar{R}^2$	0.06	0.48	0.20	0.62
F-ratio	1.55	20.37***	1.82	11.68***
Number of sample cases	557	557	187	187

[a] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express as percentage point differentials in the dependent variable associated with a 1-point difference in an explanatory variable.

*p <.10; **p < .05; ***p < .01 (two-tailed tests).

Among young men and older women, there is some evidence of a relationship between unemployment and job satisfaction. With respect to labor force participation, training during the period, health, work experience, and length of service with employer, there is also some evidence of systematic relationships with the degree of job satisfaction or with changes in satisfaction during the period. It too, however, hardly pertains equally to all of the subgroups. Furthermore, while bivariate relationships have previously been observed between several of these variables and job satisfaction (Lawler, 1973, p. 82), the multivariate results reported here show that there tends to be little association between them within all subgroups among individuals who are similarly situated.

With respect to the remaining personal, demographic, and job-related variables included in the regression analysis, a relationship between marital status and job satisfaction is apparent only for black women. Among the younger black women, those who were married during the period were above-average in job satisfaction at the end of the period and above-average in the likelihood of expressing greater job satisfaction at the end of the period than at the beginning. Indeed, those women who both married and gave birth to a child during the period differed little from those who only married during the period in degree of job satisfaction and in changes in satisfaction. Among their older counterparts, those black women who were married and had a young child at the beginning of the period were above-average in job satisfaction at the end of the period and above-average in tendency to increase their job satisfaction over the course of the period. Older black women whose marriage was dissolved during the period, however, either because of separation, divorce, or the death of a spouse, were considerably below-average in tendency to be highly satisfied with their job and above-average in tendency to become increasingly dissatisfied with their jobs during the period.

Differences in job satisfaction are also apparent within several of the subgroups between migrants and nonmigrants, those in the South and non-South, and those in rural and urban areas. There is no evidence, however, of a relationship between education and either job satisfaction or changes in job satisfaction. Among white and black middle-aged men, migrants tended to be more highly satisfied at the end of the period and to have become more highly satisfied during the course of the period than nonmigrants. Among white and black girls, however, these relationships are reversed. Furthermore, levels of job satisfaction tended to be higher and to have risen during the period in the South than non-South among white and black young men and among black girls. The results concerning rural/urban differences, however, are not consistent across age-sex-race groups.[24]

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[24] To examine the extent to which some of the relationships have been attenuated by controlling so extensively for individual differences in personal, demographic, and job-related characteristics, the relationships between several variables and changes in job satisfaction were re-examined with considerably fewer control variables in each regression. The data are presented in Appendix B to this chapter.

VII. SUMMARY AND CONCLUSIONS

Although there are serious and special labor market problems confronting each of the NLS cohorts, relatively few workers in this study explicitly expressed dissatisfaction with their jobs. Fewer than 15 percent of the workers within any of the eight age-sex-race groups reported that they disliked their jobs either "somewhat" or "very much" at any survey date during the 1966-1972 period. The remainder of workers, however, were not entirely pleased with their jobs, since, within demographic subgroups, the proportion less than highly satisfied ranged as high as 67 percent on occasion during the period. Generally consistent with what other studies have found, the NLS data show that blacks tended to be less satisfied with their jobs than whites, and youth tended to be less satisfied than older workers. Inconsistent with what has been previously recorded, though, women tended to be more highly satisfied with their jobs than men during the period.

Perhaps the most important finding of this study is that job satisfaction declined during the 1966-1972 period within nearly all of the eight age-sex-race groups. Among those employed throughout the entire period, for example, the proportion of workers highly satisfied with their jobs dropped from 5 to 13 percent within seven of the eight groups. Virtually all of the decline was from "highly satisfied" to "somewhat satisfied," making it likely that the absence of a downward trend in the national data reported by Quinn et al. (1974) resulted from an aggregation bias in their classification of responses to the job satisfaction question. Furthermore, the declines in job satisfaction primarily tended to be a phenomenon of the 1970's, since drops in satisfaction tended to be more pronounced in the latter half of the 1966-1972 period than in the former.

The NLS data also demonstrate that the consistent downward trends in job satisfaction are due more to trends within certain occupations than to downward trends within all major occupations. Contrary to the popular notion of "blue collar blues," the downward trends in job satisfaction are least consistent and meaningful among operatives and laborers and most consistent and meaningful among white collar workers, craftsmen, service workers, farmers, and farm managers. Only for white middle-aged men was there a decline in job satisfaction among operatives or laborers.

Also inconsistent with popular beliefs, among blue collar and service workers white youth are no less satisfied with their jobs than their middle-aged counterparts. The declines in job satisfaction occur within numerous industrial and income categories, with patterns that are often inconsistent across age-sex-race groups. Overall, it appears that job dissatisfaction has not declined exclusively among those whose unique labor market problems have already been singled out by policy makers for special attention: the unskilled and poorly paid, and, in particular, minority group members faced with limited employment opportunities. Where job dissatisfaction has declined, the decline has not been entirely at the lower end of the occupational, industrial, and income structures, or only within certain age-sex-race groups.

What factors are linked to the observed pattern of levels and trends in job satisfaction? Why are some individuals more likely than others to be dissatisfied with their jobs or to grow increasingly dissatisfied with their jobs? Although the evidence is by no means unambiguous, in the aggregate the most consistent links are to the overall state of the economy and to a slight overall shift during the period in the preferences and tastes of workers toward more "intrinsic" work rewards.

From the evidence, declines in job satisfaction cannot be attributed solely to deficiencies in earnings, since declines generally were no more likely among those whose earnings fell than among those whose earnings rose, particularly when differences in occupational status have been held constant. The strong cross-sectional association usually observed between earnings and job satisfaction apparently is less consistent and systematic when viewed longitudinally, and appears to be due more to the fact that high earnings reflect more satisfactory types of work than that they reflect a salient work reward.

The absence of a strong and systematic linkage between the earnings and job satisfaction experience of these workers during the 1966-1972 period also is borne out by the respondents' self-reports of the job facets that they liked best and disliked most, where there is little indication of either a growing or especially strong interest in economic rewards during the course of the period. While students of labor-management relations would expect "bread and butter" factors to play a prominent role in shaping the job satisfaction of workers, the NLS data clearly do not support such a role.

Other factors only weakly linked to job satisfaction include movements into and out of the work force during the period, the reception of formal occupational training, health problems, length of service with employer, age, and marital status. Furthermore, except for male youth, there is little evidence that job changers were any less likely to evince a decline in job satisfaction than nonchangers. There are several exceptions to these generalizations, however, since marital instability among black women and the onset of health problems among middle-aged men were found to be more common among those who experienced a decline in job satisfaction than among those who did not.

By far the most consistent and systematic correlate of job satisfaction and of changes in satisfaction is the occupational status of the job. This particularly is true among those who in a statistical sense are equal in a wide range of personal, demographic, and job-related aspects. Among such comparable workers, those who held jobs higher in status, regardless of the income and job security the jobs provided, tended to be more highly satisfied with their work than their counterparts in lower status jobs, and tended also to be less inclined to experience decreased job satisfaction. Promotions into such jobs have also been seen to lead to higher levels of job satisfaction. Thus, labor market imperfections, causing comparable workers to vary widely in occupational status and promotions, are consistently and systematically related to levels and trends in job satisfaction. These findings are therefore consistent with those reported in the previous chapter regarding the link between labor market segmentation and job dissatisfaction.

APPENDIX A

MEASUREMENT OF VARIABLES IN REGRESSION ANALYSES

To measure annual earnings, actual wage and salary earnings reported in the initial survey are used, rounded to the nearest thousand dollar amount. Change in annual earnings is measured by differencing the annual wage and salary earnings reported at the first and last survey dates. Occupational status is measured by the Duncan (1961) Index and change in occupational status by differencing scores on the Duncan Index at the beginning and end of the period. With the exception of the middle-aged men, change of employer is measured by a variable assigned the value 1 if a change of employer was recorded during the course of the period and 0 if otherwise. In the case of the older men, two variables are used--the first assigned the value 1 if a voluntary change of employer occurred and 0 if otherwise, and the second assigned a 1 if an involuntary change of employer occurred and 0 if otherwise. The reference group consists of those respondents who remained with the same employer during the entire period.

To measure completion of formal occupational training, a variable has been assigned the value 1 if formal training was received prior to the beginning of the period and 0 if otherwise. In the case of formal training during the course of the period, a variable is assigned the value 1 if training was received between the first and last survey dates and 0 if otherwise. Health status during the course of the period has been measured by three variables, each assigned the value 1 or 0. The first is assigned a 1 if health was reported to affect work at both the first and last survey dates, and 0 if otherwise. The second was assigned a 1 if health limited work only at the first survey date, and the third assigned a 1 if health limited work only at the last survey date. The reference group consists of those whose health did not limit their work at either the first or last survey dates.

Length of service is, with one exception, measured in terms of the actual number of years of service reported at the initial survey date. For the middle-aged men, length of service is captured by three variables, each assigned the value 1 or 0. The first is assigned a 1 if the respondent reported 2-9 years of service, the second a 1 if 10-19 years of service, and the third a 1 if 20 or more years of service. The reference group consists of those with 0 or 1 years of service. For the young men and women, prior work experience is measured in terms of Age minus Years of Schooling minus 5. With the middle-aged men, however, two dichotomous variables for Ages 50-54 and 55-59 are used with men 45-49 at the first survey date as the reference group. For the mature women, the proportion of the years since schooling was completed that the respondent worked six months or more is used to capture prior work experience. Also, two dichotomous variables are used for ages 35-39 and for 40-44, with those 30-34 at the first survey as the reference group.

For both cohorts of men, marital status during the course of the period is captured by three dichotomous variables. The first is assigned the value 1 if the respondent was not married at either the first or last survey date, the second a 1 if not married at the beginning of the period but married by the end of the period, and the third a 1 if not married at the end of the period but married at the beginning. The reference group consists of those who were married at both the beginning and the end of the period. For the younger women, two dichotomous variables are used. The first is assigned the value 1 if the woman was married during the period, and the second a 1 if the woman was married and had a child during the period. The reference group consists of those young women who were not married during the period.

For the older women, six dichotomous variables were used since there were sufficient observations within categories for additional types of changes in family circumstances. The first is assigned a 1 if the woman was not married, but had a child 0-5 years of age at the first survey date, and 0 if otherwise. The second is assigned a 1 if the woman was married with a child 0-5 years of age at the first survey date, and 0 if otherwise. The third is assigned a 1 if the woman was married but with no child 0-5 years of age at the beginning of the period. The fourth, fifth, and sixth dichotomous variables capture changes in status during the period. Those married during the period, but with no child during the period, are assigned a 1 on the fourth; those both married during the period and having a child during the period were assigned a 1 on the fifth; and those who were separated, divorced, or widowed during the period were assigned a 1 on the sixth variable. The reference group therefore comprises those women not married and without a young child throughout the period.

To measure region of residence, a variable is assigned the value 1 if the respondent resided in the South and 0 if non-South. City size has been captured by two dichotomous variables for degree of urbanization in the local labor market. With rural areas, small towns, or small cities as the reference group, medium-size cities (200,000-699,999) and large urban areas (700,000 or more) are captured by the two dummy variables.[1] To measure geographic mobility, a variable is assigned the value 1 if a change of county or SMSA was recorded during the period and 0 if otherwise. Finally, educational attainment is captured by three dummy variables for 9-11, 12, or 13+ years of schooling. The reference group consists of those who completed 0-8 years of schooling.

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[1] In the NLS data, size of the local labor market is measured by the size of the labor force in the local labor market area rather than by the actual population.

APPENDIX B

ADDITIONAL REGRESSION RESULTS

To examine the extent to which some of the relationships observed in Tables 3.12 to 3.15 have been attenuated by controlling so extensively for individual differences in personal, demographic, and job-related characteristics, the relationships between several variables and changes in job satisfaction are re-examined in Appendix Tables 3A.1 to 3A.5 with considerably fewer control variables in each regression. In Table 3A.1, the relationship between change in annual earnings and change in job satisfaction is re-examined for each of the eight subgroups controlling only for individual differences in initial levels of job satisfaction and earnings. Among individuals who were equal initially in degree of job satisfaction and earnings, the evidence shows that those with the greatest growth in earnings during the course of the period were more likely than average to have increased in job satisfaction by the end of the period within four subgroups. Thus the results do not differ considerably from those in Tables 3.12 to 3.15, where numerous other factors intercorrelated both with earnings and job satisfaction also have been controlled. Among blacks within three of the four cohorts, and among young white males, earnings advances during the period are systematically related to increased job satisfaction (Table 3A.1).[1]

In Table 3A.2 the relationship between changes of employer and changes in job satisfaction is presented for each of the subgroups, controlling only for initial differences in job satisfaction. As before, young men who changed employers were more likely to increase their job satisfaction than their counterparts who did not shift jobs. In addition, white middle-aged men who changed employers demonstrated increased job satisfaction relative to those who did not change employers. The fact that the relationships are less consistent than one might expect is supported by the small zero-order correlations between change of employer and changes in job satisfaction. For the eight subgroups they range from -.066 to -.146. Thus, for none of the groups is the gross relationship substantial, casting serious doubt as to whether changes of employer in the aggregate produce any lasting beneficent effect in terms of increased job satisfaction.

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[1] Before a relationship between earnings and changes in job satisfaction is too readily dismissed for the other four subgroups, it should be noted that there are a number of factors which bias downward the observed relationship. Demographic differences in price level, for example, cause identical "real" earnings to be concealed dramatically by observed differences in "money" earnings. Furthermore, the scaling of the job satisfaction measure inevitably results in many individuals at the top of the scale being precluded from registering even greater degrees of job satisfaction as their earnings advance.

The data in Table 3A.3 present the relationships between occupational status and changes in job satisfaction, and between changes in occupational status and changes in job satisfaction. Table 3A.4 shows the relationship between unemployment and change in satisfaction. The results in both tables are more systematic than those previously observed and wholly consistent with the generalizations previously made. Based on the data in Tables 3.12 to 3.15, the young men and older women with the greatest unemployment experience during the period were most likely to have grown dissatisfied with their jobs. There is no pattern, however, to the relationships between unemployment and changes in job satisfaction observed among middle-aged men or young women.

The relationships between weeks out of the labor force and changes in job satisfaction during the period (Table 3A.4) are hardly more systematic than before, where a large range of personal, demographic, and job-related characteristics were held constant. The same appears to be true in Table 3A.5, where the relationship between health problems and changes in job satisfaction during the period are examined controlling only for individual differences in initial levels of job satisfaction. With the single exception of white middle-aged men, it appears unlikely that the onset of health problems during the period had anything to do with the declining levels of job satisfaction that were observed. The existence of a health problem throughout the period, however, is systematically related to increased dissatisfaction among both cohorts of black men.

TABLE 3A.1

REGRESSION RESULTS--RELATIONSHIPS BETWEEN CHANGE IN JOB SATISFACTION AND ANNUAL EARNINGS DURING PERIOD: BY AGE, SEX, AND RACE

(t-ratios)

	Middle-Aged Men		Young Men		Mature Women		Young Women	
Explanatory variable:	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Initial earnings	.014	-.027	-.011	.012	.002	-.007	-.031	-.025
	(4.57)***	(-2.86)***	(-1.16)	(0.48)	(0.20)	(-0.56)	(-1.81)*	(-0.69)
Change in earnings	.006	-.027	-.025	-.043	-.003	-.048	-.020	-.037
	(1.33)	(-2.75)***	(-3.37)***	(-2.35)**	(-0.41)	(-3.23)***	(-1.29)	(-1.24)
Initial job satisfaction	-.726	-.819	-.841	-.943	-.762	-.813	-.808	-.967
	(-32.63)***	(-23.95)***	(-25.68)***	(-15.07)***	(-22.71)***	(-20.53)***	(-21.24)***	(-14.46)***
Constant	1.35	1.468	1.43	1.74	1.110	1.346	1.344	1.723
	(27.47)***	(18.23)***	(17.88)***	(11.48)***	(17.93)***	(17.08)***	(13.76)***	(10.41)***
$\bar{R}^2$	0.38	0.45	0.43	0.42	0.35	0.46	0.44	0.52
F-ratio	355.19***	191.70***	219.88***	76.67***	174.37***	152.86***	151.01***	70.37***
Number of sample cases	1,709	705	880	319	995	535	587	199

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3A.2

REGRESSION RESULTS--RELATIONSHIP BETWEEN CHANGE IN JOB SATISFACTION AND CHANGE OF EMPLOYER DURING PERIOD: BY AGE, SEX, AND RACE

(t-ratios)

Explanatory variable:	Middle-Aged Men		Young Men		Mature Women		Young Women	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Changed employer	-.124 (-2.79)***	.501 (0.71)	-.077 (-1.68)*	-.173 (-1.82)*	.043 (1.08)	-.034 (-0.63)	.001 (0.03)	.232 (2.12)**
Initial job satisfaction	-.708 (-31.93)***	-.803 (-22.88)***	-.804 (-23.74)***	-.930 (-15.29)***	-.760 (-23.19)***	-.828 (-21.59)***	-.813 (-22.15)***	-1.006 (-14.82)***
Constant	1.206 (32.55)***	1.264 (21.47)***	1.298 (21.48)***	1.762 (13.50)***	1.091 (22.58)***	1.288 (20.31)***	1.219 (19.60)***	1.528 (12.26)***
$\bar{R}^2$	0.38	0.45	0.42	0.46	0.34	0.46	0.45	0.53
F-ratio	353.25***	185.52***	297.09***	122.41***	272.38***	244.17***	251.02***	111.23***
Number of sample cases	1,767	686	839	286	1,045	570	610	199

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3A.3

REGRESSION RESULTS--RELATIONSHIP BETWEEN CHANGE IN JOB SATISFACTION AND OCCUPATIONAL STATUS DURING PERIOD: BY AGE, SEX, AND RACE

(t-ratios)

Explanatory variable:	Middle-Aged Men Whites	Middle-Aged Men Blacks	Young Men Whites	Young Men Blacks	Mature Women Whites	Mature Women Blacks	Young Women Whites	Young Women Blacks
Initial occupation	-.005	-.003	-.006	-.005	-.005	-.005	-.003	.000
	(-7.20)***	(-2.24)**	(-5.15)***	(-1.73)*	(-5.44)***	(-3.82)***	(-2.07)**	(0.08)
Change in occupational status	-.003	-.005	-.007	-.009	-.006	-.005	-.007	-.006
	(-2.98)***	(-2.39)**	(-5.77)***	(-2.98)***	(-3.60)***	(-2.10)**	(-3.61)***	(-1.58)
Initial job satisfaction	-.740	-.817	-.829	-.924	-.790	-.842	-.825	-.935
	(-34.36)***	(-24.75)***	(-26.14)***	(-16.13)***	(-24.43)***	(-22.11)***	(-22.82)***	(-13.49)***
Constant	1.424	1.349	1.513	1.776	1.379	1.428	1.383	1.555
	(29.82)***	(20.12)***	(21.35)***	(13.12)***	(20.32)***	(19.32)***	(14.53)***	(10.00)***
$\bar{R}^2$	0.39	0.46	0.43	0.46	0.37	0.48	0.46	0.53
F-ratio	394.95***	212.09***	234.96***	91.82***	202.67***	172.85***	175.45***	72.72***
Number of sample cases	1,869	744	926	333	1,054	572	610	199

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3A.4

REGRESSION RESULTS--RELATIONSHIPS BETWEEN CHANGE IN JOB SATISFACTION AND WEEKS OF UNEMPLOYMENT AND WEEKS OUT OF THE LABOR FORCE DURING PERIOD: BY AGE, SEX, AND RACE

(t-ratios)

	Middle-Aged Men		Young Men		Mature Women		Young Women	
Explanatory variable:	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Weeks of unemployment	.000 (0.06)	.002 (0.78)	.008 (2.58)***	.011 (2.25)**	.007 (3.04)**	.007 (2.48)**	-.002 (-0.25)	.008 (1.14)
Weeks out of labor force	.001 (0.57)	-.001 (-0.38)	.003 (1.76)*	-.003 (-0.84)	.001 (0.72)	.000 (0.25)	.003 (1.65)*	-.003 (-1.07)
Initial job satisfaction	-.705 (-32.55)***	-.822 (-24.06)***	-.823 (-24.92)***	-.969 (-16.75)***	-.761 (-22.94)***	-.844 (-21.83)***	-.823 (-22.31)***	-.965 (-13.83)***
Constant	1.187 (33.03)***	1.280 (22.19)***	1.242 (21.89)***	1.650 (13.89)***	1.080 (21.95)***	1.281 (19.50)***	1.215 (19.57)***	1.611 (13.11)***
$\bar{R}^2$	0.37	0.46	0.42	0.50	0.35	0.47	0.46	0.52
F-ratio	358.23***	200.48***	208.48***	98.32***	175.99***	159.20***	168.85***	69.91***
Number of sample cases	1,807	715	874	298	983	447	595	195

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

TABLE 3A.5

REGRESSION RESULTS--RELATIONSHIP BETWEEN CHANGE IN JOB SATISFACTION AND CHANGE IN HEALTH STATUS DURING PERIOD: BY AGE, SEX, AND RACE

(t-ratios)

Explanatory variable:	Middle-Aged Men		Young Men		Mature Women		Young Women	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Health problem throughout	.063 (1.21)	.258 (3.01)**	.096 (0.76)	.544 (1.83)*	-.043 (-0.41)	.089 (0.58)	.081 (0.40)	.000 (0.00)
Health problem initially	.001 (0.03)	.103 (1.27)	.018 (0.21)	.238 (1.17)	.000 (0.00)	.000 (0.00)	-.025 (-0.17)	.158 (0.71)
Health problem at end	.124 (2.48)**	-.002 (-0.03)	-.212 (-1.61)	.162 (0.52)	.101 (1.15)	.053 (0.59)	-.089 (-0.60)	.265 (0.91)
Initial job satisfaction	-.711 (-33.42)***	-.817 (-25.22)***	-.818 (-24.86)***	-.951 (-16.44)***	-.760 (-23.44)***	-.832 (-22.09)***	-.806 (-22.07)***	-.959 (-14.64)***
Constant	1.175 (32.35)***	1.249 (22.21)***	1.265 (13.38)***	1.415 (6.24)***	1.103 (23.07)***	1.274 (20.07)***	1.218 (19.89)***	1.575 (13.33)***
$\bar{R}^2$	0.37	0.46	0.42	0.49	0.35	0.46	0.45	0.52
F-ratio	279.82***	160.69***	157.04***	72.30***	184.67***	163.16***	123.28***	72.46***
Number of sample cases	1,883	751	890	309	1,055	571	610	201

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

CHAPTER IV

INTERNAL-EXTERNAL ATTITUDES, PERSONAL INITIATIVE, AND LABOR MARKET EXPERIENCE

Paul J. Andrisani

I. INTRODUCTION

In an economic system in which individuals may freely choose among various employment opportunities, the effective allocation of human resources depends upon workers exercising initiative in pursuit of their particular employment goals. In theory, differentials in economic rewards, given variation in worker preferences, are presumed to attract individuals into those jobs in which their contribution to social product will be at a maximum. In equilibrium, therefore, no worker could enhance either his own satisfaction or the total social product by making any kind of job change. But this can occur only if all workers are responsive to the incentives of the marketplace and to the prompting of their particular goals--i.e., if workers have the initiative to succeed.

Conceptually, individual differences in initiative are possible at every level of skill and ability. College graduates, for instance, do not all have equally high degrees of initiative, nor are all high school dropouts necessarily lacking in it. It is likely that equally qualified workers vary in levels of initiative even within a particular firm and a specific job classification.

To a large extent, such differences doubtless reflect variation among individuals in the payoffs they ascribe to initiative, or, to use the language of Julian Rotter (1966), differences in perceived "internal-external" attitudes. In the framework of Rotter's social learning theory, internal-external attitudes refer to the degree to which an individual perceives success as being contingent upon personal initiative. At one end of the internal-external continuum are the highly internal, those who perceive effort to be largely instrumental in attaining success. At the opposite end of the spectrum are the highly external, those who ascribe little or no value to initiative since, in the extreme case, success is viewed as completely unrelated to ability and effort.

For research inquiring into the role of initiative in the context of labor market experience, the construct of internal versus external attitudes is particularly appropriate for at least six reasons. First, the internal's belief that success results from hard work and that failure is an individual responsibility is firmly rooted in a Protestant work ethic. As a consequence, individual differences in internal-external attitudes reflect varying degrees of commitment to the work ethic and value system embraced by the mainstream of the American work force. Second, although there has been little evidence from which to judge, there are some who suggest that white-black differences in labor market experience stem mainly from racial differences in work ethic attitudes closely resembling the internal-external distinction.[1]

Third, the perceived payoff to initiative is also the crucial factor in what has become known among industrial psychologists as "expectancy theory of work motivation."[2] While there are several elaborations of the basic expectancy formulation, there is virtual unanimity in that the perceived payoff to initiative is the crucial element in generating initiative to work. Fourth, internal-external attitudes bear a close conceptual similarity to the concept of alienation. The particular variant of alienation encompassed by these attitudes, feelings of powerlessness, is perhaps the most interesting from an historical perspective. It is, for example, the variant of alienation most prominent in the early writings of Marx.[3]

Fifth, there is considerable empirical evidence demonstrating the importance of these attitudes for socioeconomic attainment. The Coleman Report (Coleman et al., 1966) observed individual differences in internal-external attitudes to be the best predictor of academic achievement among blacks. On the basis of this relationship Coleman (1971, p. 193) was later prompted to write:

> . . . internal changes in the Negro, changes in his conception of himself in relation to his environment, may have more effect on Negro achievement than any other single factor. The determination to overcome relevant obstacles, and the belief that he will overcome them . . . may be the most critical element in achieving equality of opportunity. . . .

Finally, internal-external attitudes are also relevant to labor market research since initiative may be affected by an individual's labor market experience as well as being a determinant thereof. Indeed, the influence of labor market forces on an individual's perception of personal efficacy is a matter that has elicited increasing public policy concern in recent years.[4]

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[1] See, for example, the writings of Lewis (1969); Banfield (1970); and Moynihan (1967).

[2] For reviews of this literature see: Vroom (1964); and Porter and Lawler (1968).

[3] The resemblance between internal-external attitudes and alienation is discussed thoroughly in Seeman (1959, 1972a, 1972c) and in Rotter (1966). As Fromm (Faunce, 1968, p. 85) has noted: "Alienation (or 'estrangement') means, for Marx, that man does not experience himself as the acting agent in his grasp of the world, but that the world (nature, others, and he himself) remain alien to him. They stand alone and against him as objects, even though they may be objects of his own creation."

Despite the fact that the psychological literature on internal-external attitudes is quite voluminous,[5] and although labor market researchers have become increasingly mindful of the importance of such attitudes in the analysis of labor market experience, research has hardly begun to explore the role of these attitudes as either contributors or outcomes in the dynamics of work experience. Historically, research efforts have been hampered by the unavailability of longitudinal data on large national samples. The literature is also limited, however, by insufficient attention to the dimensionality issue raised by numerous psychologists, particularly by the Gurins.[6] According to their factor analyses, internal-external attitudes have at least two distinct dimensions, only one of which actually captures the perceived payoffs to initiative.

II. OBJECTIVES OF THE RESEARCH

This chapter has four major objectives. First, it examines the influence of internal-external attitudes on a number of facets of subsequent labor market experience during the 1968-1971 period by way of longitudinal analysis.[7] In each case our interest is in ascertaining whether internal-external attitudes have an influence independent of skills, abilities, and selected demographic characteristics that are known to be related to labor market experience, an issue frequently overlooked in the literature on internal-external attitudes.[8] By examining the influence of internal-external attitudes on labor market experience for whites and blacks separately, we seek to gain insight into whether racial differences in labor market experience are due more to a lower propensity among blacks to possess an internal attitude or to lower "returns" to initiative among blacks than among whites.

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[4] The growing public policy concern for the degree to which such attitudes are affected by the labor market experience of individuals is clearly evinced in a number of recent studies. See for example: Gurin (1970); Gurin and Gurin (1974); Quinn et al. (1970); Quinn and Mangione (1973); Quinn et al. (1974); Work in America (1972); and Worker Alienation (1972).

[5] Since the concept of internal-external attitudes was first introduced, about 1,000 publications have appeared relating them to a wide variety of psychological and sociological variables. For reviews of this literature, see: Joe (1971); Lefcourt (1966, 1972); MacDonald (1972); MacDonald and Davis (1971); Rotter (1966); Rotter et al. (1972); Throop and MacDonald (1971).

[6] See: Brim (1974); Cherlin and Bourque (1974); Collins (1974); Gurin et al. (1969); Gurin and Gurin (1970, 1976); Levenson (1973, 1974); and Mirels (1970).

[7] This portion of the analysis has been conducted for only three of the four NLS cohorts. Data on labor market experience subsequent to the initial measurement of the attitudes were not available for the younger women at the time of this study.

[8] As Seeman (1972a, p. 482) has noted, internal-external attitudes "may contribute very little independent understanding of participation and social action when the proper (and multiple) controls are applied."

Second, the chapter examines the multidimensionality of internal-external attitudes by testing the Gurin hypothesis. Based on the findings of the Gurins' original factor analyses and their subsequent empirical work, those items of the internal-external attitude scale that capture "Protestant Work Ethic Ideology" should bear a very different, and generally less important, relationship to work experience than those items thought to capture differences in the perceived payoffs to initiative. To examine this issue, the empirical analysis outlined above as the first research objective is repeated, substituting for the measure of internal-external attitudes: (1) only the items that purportedly capture the perceived payoffs to initiative; (2) only the items that purportedly capture "Protestant Work Ethic Ideology"; and (3) each of the subscales as separate explanatory variables in the same analysis.

The third major objective of this chapter is to ascertain the degree of stability in internal-external attitudes among middle-aged males over the 1969-1971 period, and to determine whether labor market and environmental forces are correlated with those changes in attitude that are found to exist.[9] In the process, the chapter also examines whether the two subscales delineated by the Gurins respond differently to labor market and environmental forces.

The fourth research objective is to examine age, sex, and race differences in internal-external attitudes, and age-sex-race differences in their relationship to labor market experience.

III. CONCEPTUAL FRAMEWORK

Before proceeding to examine empirically the interrelation between internal-external attitudes and labor market experience, there are several conceptual issues which need to be discussed. The first involves the ways in which an internal-external attitude may be translated into labor market success or failure. The second relates to the possible effects of internal-external attitudes on racial differentials in labor market experience. The third relates to the issue of the multidimensionality of internal-external attitudes raised by the Gurins, and its particular relevance to the labor market problems of blacks. Finally, the fourth concerns the importance of exploring the effects of labor market and environmental forces on internal-external attitudes.

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[9] Although the measure of internal-external attitudes was administered at two points in time to each of the four NLS cohorts, the data for both administrations were available only for the cohort of middle-aged males at the time of the present study (Autumn 1975). Nonetheless, the use of this cohort for the present study is particularly appropriate for empirically assessing the stability of internal-external attitudes. Should internal-external attitudes respond systematically to work experience among men whose self-concepts have been formed over a considerable number of years, it is likely that they respond also to employment experience among other age-sex cohorts as well.

Internal-External Control as Contributor

Although the role of internal-external attitudes as a determinant of labor market experience has received little attention, the literature contains strong evidence that an internal attitude reflects a propensity to influence one's environment.[10] From this literature several ways in which internal-external attitudes might influence labor market experience can easily be developed.

Since internals perceive greater merit in the expenditure of effort than externals, they may search the labor market more carefully for job opportunities and better avail themselves of those which arise.[11] By having their labor market "antennae" more finely tuned to ways of exploiting relative advantage, internals may also invest in greater amounts of and more valuable types of vocational skills, and more effectively utilize the talents they come to possess.[12] As a consequence of more diligent preparation for work, more careful scanning and exploitation of job opportunities, and more fully utilizing their potential, internals are expected to be employed in the higher status, better paying, and psychologically more satisfying jobs. In addition, internals are also expected to be less prone to unemployment, and more likely to advance in their careers.

It should not be overlooked, however, that employer efforts to identify, hire, and promote individuals with initiative may also help to explain an association between internal-external attitudes and labor market experience.

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[10] As Rotter (1966, p. 25) has noted: "A series of studies provides strong support for the hypotheses that the individual who has a strong belief that he can control his own destiny is likely to: (a) be more alert to those aspects of the environment which provide useful information for his future behavior; (b) take steps to improve his environmental condition; (c) place greater value on skill or achievement reinforcements and be generally more concerned with his ability, particularly his failures; and (d) be resistive to subtle attempts to influence him."

[11] There is considerable evidence to support the notion that internals differ systematically from externals in seeking and utilizing information regarding important life situations. See, for example, Seeman and Evans (1962); Rotter (1966, 1972); and Phares (1968).

[12] There is some previous evidence from the National Longitudinal Surveys that supports this line of thought. See Valecha (1972) and Parnes et al. (1973).

Personal interviews, letters of recommendation, and psychological testing typically serve this purpose in the hiring process, while performance records and supervisory ratings may serve it in differentiating candidates for advancement, layoff, or dismissal.

Internal-External Attitudes and White-Black Differentials

Originally developed by anthropologist Oscar Lewis in 1961, the concept of a poverty culture has taken root more quickly than almost any other social term in the past decade.[13] It has provided an explanation for the entrenchment of poverty despite continued prosperity and monumental social-welfare legislation, and it has been broadly interpreted to provide a basis for several aspects of manpower policy.[14]

In the study that initiated the poverty culture concept, Lewis observed that the poor of all industrialized countries resemble each other more than they resemble their nonpoor countrymen, especially in terms of a fatalistic attitude virtually identical to Rotter's concept of externality. Lewis concluded that cultural differences in these important attitudes perpetuate economic inequality from one generation to the next. The poor are poor, he argued, because they have inherited a faulty culture which embraces a value system incompatible with the American work ethic, which places little value on initiative as a means toward upward mobility, and thereby generates low levels of initiative.

Although it is not true that all blacks are poor or that all whites are nonpoor, white-black differences in labor market experience are often approached from a poverty culture perspective, since poverty is more common among blacks than among whites. A number of scholars have maintained, however, that observed patterns of motivational attitudes are largely endogenous to the socioeconomic system.[15] Rather than white-black differentials in labor market experience deriving from a lower propensity of blacks to have an internal attitude, they contend that racial differentials in experience may also result from lower "returns" to the initiative of blacks. If blacks perceive less payoff to their initiative than is perceived by comparable whites, it may result solely from a well-founded realization that the labor market rewards initiative of blacks less than the initiative of whites. As the Gurins have noted:[16]

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[13] Lewis (1961; 1969). Also see Banfield (1970) and Moynihan (1967).

[14] As Gurin (1970, pp. 85-86) has noted: "Most training programs devoted to the hard-core unemployed have viewed problems as psychological and motivational, not just deficiencies in skill and education." Mangum (1971, p. 101) also noted that manpower training and work programs of the sixties were to a large degree rooted firmly in a poverty culture rationale in that they "all assumed that the solution was to change the worker by adding to his skills and experience or changing his attitudes."

[15] See, for example, Valentine (1968); Gurin (1970); and Goodwin (1972).

> . . . the expectancy aspect of motivation emphasizes psychological forces that mirror the environment itself. We argue that expectations of success must be very low and externally based where the environment is so constraining. Expectancies can only begin to facilitate mobility and achievement where some opportunity exists.

While neither denying the existence and importance of labor market discrimination, nor being necessarily in sympathy with a poverty culture approach, there are some who argue that initiative is more valuable for blacks than whites. Coleman et al. (1966) found that attitudes closely resembling internal-external outlooks were of considerably greater importance for educational attainment among blacks than whites. Similarly, Duncan et al. (1972) have argued that it is precisely where social conditions are not amenable to achievement that personal initiative is most essential.

Unfortunately, there is little empirical evidence relating to the importance of internal-external attitudes in explaining white-black differences in labor market experience. In perhaps the only study to have examined this issue, Andrisani and Nestel (1975) found that among middle-aged men internal-external attitudes were less strongly related to the labor market experience of blacks than whites. Initiative of blacks appeared to be of no consequence in gaining access to the better, higher status occupations, but was of considerable importance for occupational attainment among whites.

The Multidimensionality of Internal-External Attitudes

Although Rotter's (1966) factor analyses suggested a single dimension of internal-external attitudes, subsequent analyses by other investigators have emphasized the need for multidimensional conceptualizations and measures of internal-external attitudes.[17] The Gurins have been particularly active in decomposing internal-external attitudes into their constituent dimensions, in developing measures of these dimensions, and in relating the dimensions to various behaviors.[18] The importance of distinguishing dimensions of internal-external attitudes stems mainly from the possibility that each of the constituent attitudes may be differentially related to specific aspects of behavior.

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[16] Gurin and Gurin (1974), p. 42, n. 6.

[17] See: Cherlin and Bourgue (1974); Collins (1974); Gurin and Gurin (1974, 1976); Gurin et al. (1969); Levenson (1973, 1974); and Mirels (1970).

[18] Gurin and Gurin (1970, 1976) and Gurin et al. (1969).

According to the Gurins (1970, 1976), only one of the dimensions actually captures what Rotter's (1966) concept of internal-external attitudes had intended. If true, the overwhelming majority of studies on these attitudes in the psychological literature, having paid insufficient attention to the multidimensionality issue, have produced "biased" estimates of the actual relationships between the expectancy that initiative leads to success and the specific aspects of behavior with which these attitudes have been correlated. This is particularly troublesome where the absence of a relationship is observed, in which case it is not possible to ascertain unambiguously whether the attitude is unimportant or whether its effect has been attenuated by confounding dimensions. Even where significant relationships are observed, however, it is possible that they are spurious and result from the confounding effects of other dimensions rather than from the importance of perceived payoffs to initiative.

Since the distribution of one of the dimensions across demographic subgroups may bear little relationship to the distribution of another, and since any particular dimension, or all of them, may be differentially related to a specific aspect of behavior among demographic subgroups, direct comparisons of relationships observed within subgroups between Rotter's (1966) measure of internal-external attitudes and specific aspects of behavior are highly questionable. If there is merit to the multidimensionality issue, Rotter's (1966) measure of internal-external attitudes cannot be used as though it were unidimensional to compare, for instance, the observed effects of these attitudes on the labor market experience of whites with the observed effects on blacks. However, in perhaps the only study to have addressed the issue of the relative importance of these attitudes for labor market success, this is precisely what was done.[19]

The Gurins have found that the dimension actually reflecting perceived payoffs to initiative, called the "personal control" factor since success is thought to be in one's power, is related to behaviors reflecting competence and realistic achievement orientations both in school and on the job.[20] A second dimension, not related to such behaviors, has been called the "control ideology" factor. It reflects a person's endorsement of "cultural beliefs" about the determinants of success and failure--e.g., those beliefs associated with the Protestant work ethic--rather than the individual's perceptions of personal efficacy. Consequently, an individual's attitudes concerning "personal control" would be expected to be a better predictor of subsequent behavior than the individual's "control ideology."

The Gurins have argued that this distinction is particularly crucial among blacks.[21] Blacks were shown by the Gurins (1969, 1970, 1974) to differ little from whites on the control ideology factor, presumably since both races have been taught to accept the work ethic of the white majority. Blacks were shown to differ substantially from whites, however, on the personal control factor, presumably due to the very real discrimination they face in social and economic opportunities. While whites may be no more inclined than blacks to believe that hard work generally leads to success in American society, those whites who do believe this may be much more likely than their black counterparts also to believe that the same holds true for them.

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[19] Andrisani and Nestel (1975).

[20] Gurin (1968); and Gurin and Epps (1975).

[21] Gurin and Gurin (1970); Gurin et al. (1969); Gurin (1968); and Gurin (1974).

The Gurins further suggest that the importance of an individual's work ethic has been overstated, particularly for disadvantaged workers. A person's perception of the payoff to his or her own initiative, not the perception of the payoff to hard work for workers in general, is thought to be motivationally important. Since the two beliefs are thought to go hand in hand for the mainstream of the work force, the effects of the former may often be mistaken for the effects of the latter.

The distinction between "personal control" and "control ideology" is also important since there is reason to believe that the former should be less stable over time and circumstance than the latter. Personal control should be more sensitive to experience and to changes in situations which affect one's actual ability to control one's environment. However, since control ideology reflects the person's acceptance of cultural beliefs about the causes of success and failure for people in general, it is likely to remain stable and unrelated to personal experience so long as these cultural beliefs remain predominant in society.

Internal-External Control as Outcome

Exploring the stability of internal-external attitudes over time, especially among a cohort of middle-aged males, may reveal whether the removal of barriers to labor market opportunities will be perceived as increasing the payoffs to initiative, and thereby will generate increased initiative on the part of workers. Additionally, it may clarify an implicit assumption in the literature on internal-external attitudes and a crucial tenet of the poverty culture thesis. In the former case, it becomes somewhat suspect to consider internal-external attitudes as a stable personality variable, as is typically done, if they are found to be susceptible to short term changes in environmental conditions. In the latter case, the central notion that poverty is culturally determined is seriously damaged should the perceived payoffs to initiative respond systematically to objective realities of the marketplace.

Yet another interest in exploring the stability of these attitudes stems from the current public policy concern for the quality of the context in which people must work and live, and for the degree to which social and economic institutions serve the psychological as well as the economic needs of workers.[22]

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[22] Citations to this literature may be found in footnote 4.

The concept of internal-external attitudes is particularly relevant because of its similarity to the concept of alienation.[23]

In the sociological theory of "mass society," and in the major thesis of Work in America (1972), alienation in its various forms is a crucial intervening variable in social processes because it is affected by the social environment, by the organization of work in particular, and also is instrumental in influencing social behavior, especially at the work place.[24]

Although there is considerable evidence that direct cultural teaching influences the development of internal-external attitudes,[25] there has been little empirical evidence examining the extent of attitudinal change over time. Lefcourt (1972, p. 31), however, has noted some evidence from psychotherapy that suggests that "as persons successfully cope with immediate difficulties, they do seem to experience an increase in personal (internal) control." While acknowledging some potentially serious limitations of these studies, Lefcourt (1972, p. 31) considers this evidence as offering considerable support for a "theoretically probable relationship between effectiveness and increased perceptions of personal control."

IV. AGE, SEX, AND RACE DIFFERENCES IN ATTITUDES

For purposes of this analysis, internal-external attitudes will be measured by a respondent's score on an 11-item abbreviated version of Rotter's (1966) Internal-External Control Scale. These items, selected from the original 23-item scale because they appeared to be more general, adult oriented, and work related, were administered in identical form in the 1969 survey of the older men, in the 1968 survey of the younger men, the 1969 survey of the older women, and in the 1970 survey of the younger women. Each item consists of a forced-choice response to two attitudinal statements, one reflecting an internal attitude and the other an external outlook, and the respondent's opinion of how closely the forced-choice response represented his or her own view ("Is this statement much closer or slightly closer to your own opinion?").

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[23] The resemblance between internal-external attitudes and alienation is discussed thoroughly in Seeman (1959, 1972a, 1972c) and in Rotter (1966).

[24] See, for instance, Seeman (1972a); Walter (1964); Sheppard and Herrick (1972); and Work in America (1972).

[25] See Rotter (1966, p. 24); Hsieh et al. (1969); MacDonald (1971a); Powell and Vega (1972); Seeman (1972a); and Lifschitz (1973).

Each item was assigned a score from 1 to 4 on the basis of an increasingly external attitude; scores on the 11-item scale thus may range from 11 to 44.[26] It should be kept in mind that the lower the score, the more internal the attitude. Mean responses to each of the items comprising the attitudinal measure are presented by age, sex, and race in Table 4.1. Based on the factor analyses presented by the Gurins (1969), scores on the four items cast in the first person were summed to obtain a measure of the personal control factor; and scores on the remaining seven items, each cast in the third person, were summed to obtain a measure of the control ideology factor.

There are only very slight differences among the subgroups in responses to these attitudinal items. The similarity of the responses suggests that neither age nor "vintage" (cohort) effects are operating, unless changes in internal-external attitudes over the course of the life cycle are exactly offset by vintage effects--i.e., by differences between age cohorts that reflect differences in the time periods in which they were raised. The findings are therefore consistent with the implicit assumption in the psychological literature that internal-external attitudes are relatively stable during adulthood and, consequently, may represent personality dimensions.[27] The findings also provide little evidence of a changing work ethic among the young, contrary to much of the literature on the "quality of working lives."[28]

Particularly on items comprising the personal control factor, blacks consistently tended to be slightly less internal in outlook than whites of the same age and sex. These racial differences are quite small, especially among the two cohorts of women. Where they are the most substantial, among the middle-aged men, the racial difference in total scores on all eleven attitudinal items is only three points, which could reflect a difference in only one response.

Consistent with the findings of Goodwin (1972) and Gurin (1970), these modest racial differences suggest that disadvantaged workers differ little

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[26] The four scores possible for each item are "1" for internal response "much closer"; "2" for internal response "slightly closer"; "3" for external response "slightly closer"; and "4" for external response "much closer." An appendix to the Andrisani and Nestel (1975) study gives a more complete description of the NLS 11-item Internal-External Control Scale. It includes a discussion of a pretest of both the original and abbreviated versions with the same groups of subjects, revealing that the two measures produced nearly identical results. The appendix also includes the results of an item analysis.

[27] See: Joe (1971); Lefcourt (1972); and Rotter (1966).

[28] See, for example: Work in America (1972); Worker Alienation (1972); Blauner (1964); Davis and Trist (1973); Sheppard and Herrick (1972); and Walton (1972).

TABLE 4.1

MEAN SCORES ON ITEMS COMPRISING INTERNAL-EXTERNAL ATTITUDE MEASURE BY AGE, SEX, AND RACE

(standard deviation)

Item	Boys		Men		Girls		Women	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
A. (a) "People's misfortunes are a result of mistakes." or (b) "Unhappy things are due to bad luck."	1.7 (0.9)	1.9 (1.0)	1.9 (1.0)	2.0 (1.1)	1.8 (0.9)	1.9 (1.0)	2.0 (1.0)	2.0 (1.0)
B. (a) "People get the respect they deserve." or (b) "An individual's worth is often unrecognized."	2.3 (1.1)	2.3 (1.1)	2.1 (1.2)	2.3 (1.2)	2.4 (1.1)	2.3 (1.2)	2.1 (1.2)	2.2 (1.2)
C. (a) "People who fail did not take advantage of opportunities." or (b) "Without breaks you cannot be an effective leader."	1.9 (1.0)	2.1 (1.1)	1.9 (1.1)	2.3 (1.2)	1.8 (0.9)	2.1 (1.1)	1.8 (0.9)	2.2 (1.6)
D. (a) "Success is a matter of hard work." or (b) "Good jobs depend on being in the right place, at the right time."	1.9 (1.0)	2.2 (1.2)	2.0 (1.1)	2.5 (1.3)	1.8 (1.0)	1.8 (1.1)	1.9 (1.1)	2.1 (1.2)
E. (a) "What happens to me is my own doing." or (b) "Sometimes I feel that I don't have enough control over the direction my life is taking."	1.8 (1.0)	2.1 (1.1)	1.8 (1.0)	2.2 (1.2)	1.9 (1.0)	2.2 (1.1)	1.8 (1.0)	2.2 (1.1)
F. (a) "When I make plans, I am almost certain that I can make them work." or (b) "It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow."	2.2 (1.1)	2.7 (1.2)	2.1 (1.2)	2.7 (1.2)	2.4 (1.1)	2.8 (1.2)	2.3 (1.2)	2.8 (1.2)
G. (a) "In my case, getting what I want has little or nothing to do with bad luck." or (b) "Many times we might just as well decide what to do by flipping a coin."	1.6 (0.8)	1.8 (0.9)	1.6 (0.8)	1.8 (1.0)	1.7 (0.8)	1.7 (0.9)	1.6 (0.8)	1.6 (0.9)
H. (a) "Getting people to do things right depends on your ability to handle people." or (b) "To be the boss depends on how lucky you are."	1.5 (0.8)	1.7 (0.9)	1.6 (0.9)	1.8 (1.1)	1.5 (0.8)	1.5 (0.8)	1.5 (0.8)	1.7 (1.0)
I. (a) "There is no such thing as 'luck'." or (b) "Some people do not realize their lives are controlled by others."	2.7 (1.0)	2.6 (1.1)	2.6 (1.1)	2.7 (1.1)	2.7 (1.0)	2.7 (1.1)	2.8 (1.0)	2.8 (1.1)
J. (a) "My misfortunes are a result of my lack of ability." or (b) "The bad things that happen to me are balanced by good things."	2.3 (1.1)	2.3 (1.2)	2.5 (1.2)	2.5 (1.2)	2.7 (1.1)	2.3 (1.2)	2.9 (1.1)	2.4 (1.2)
K. (a) "Many times I feel that I have little influence over things that happen to me." or (b) "It is impossible for me to believe that chance or luck plays an important role in my life."	2.2 (1.0)	2.4 (1.1)	2.3 (1.1)	2.6 (1.1)	2.3 (1.0)	2.4 (1.1)	2.3 (1.0)	2.4 (1.1)
Total score	22.1 (5.2)	24.1 (5.1)	22.4 (5.8)	25.4 (5.7)	23.0 (5.0)	23.6 (4.7)	23.1 (5.2)	24.4 (5.6)
Score on personal control items	7.8 (2.5)	9.0 (2.5)	7.8 (2.6)	9.3 (2.7)	8.2 (2.5)	9.2 (2.4)	8.1 (2.5)	9.0 (2.7)
Score on control ideology items	14.3 (3.6)	15.1 (3.8)	14.6 (4.1)	16.1 (4.1)	14.8 (3.6)	14.5 (3.4)	15.0 (3.6)	15.4 (4.0)
Number of sample cases	2,691	1,003	2,552	956	3,110	1,222	2,916	1,100

from the mainstream of the work force in work ethic, despite the fact that they are quite often the victims of various forms of invidious discrimination which might justify a departure from cultural norms. These findings thus are inconsistent with the poverty culture thesis that the greater incidence of poverty among blacks might be explained by a lesser tendency to possess an internal outlook and Protestant work ethic.

The findings are also inconsistent with the hypothesis that motivational attitudes are largely endogenous to the socioeconomic system. They suggest that a significant relationship between the attitudes and labor market experience reflects the influence of the former on the latter rather than vice-versa. Otherwise, large age, sex, and racial differentials in attitudes would surely be observed.

V. INTERNAL-EXTERNAL ATTITUDES, SUBSEQUENT LABOR MARKET EXPERIENCE, AND THE MULTIDIMENSIONALITY ISSUE

To examine whether internal-external attitudes bear a relationship to subsequent labor market experience, regression equations have been estimated for each of the age-sex-race groups.[29] Six dimensions of subsequent labor market experience (LME) have been regressed on the 11-item internal-external attitude measure (I-E) and a number of control variables. The six dimensions of labor market experience examined include: (1) the natural logarithm of average hourly earnings (ln AHE), (2) the natural logarithm of annual earnings (ln AE), (3) occupational attainment (OCC), (4) growth in hourly earnings (ΔAHE), (5) growth in annual earnings (ΔAE), and (6) occupational advancement (ΔOCC).[30] The control variables in each regression include:[31]

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[29] Since information on subsequent labor market experience was not available for the younger cohort of women, the analysis is possible only for the other NLS cohorts.

[30] Average hourly earnings, annual earnings, and occupational attainment are measured 2 years after the measurement of the attitudinal variable (1970-1971). Occupational attainment is measured by the Duncan (1961) Index score of the respondent's occupation. Growth in hourly earnings is measured by the difference between average hourly earnings reported in the 1968-1969 survey and the survey 2 years later (1970-1971), with a control variable in the regression equation for average hourly earnings at the 1968-1969 survey date. Growth in annual earnings is measured by the difference between annual wage and salary earnings reported in the 1968-1969 survey and the survey 2 years later, with a control variable in the equation for annual earnings reported at the 1968-1969 survey date. Finally, occupational advancement is measured by the difference between the Duncan Index scores for the respondent's occupation in 1970-1971 and occupation in 1968-1969, with a control variable in the equation for occupational attainment at the 1968-1969 survey date.

[31] Each control variable is measured as of the same date as the attitudinal measure: 1968 in the case of the young men and 1969 in the case of the older men and women.

(1) three dummy variables for years of schooling completed--ED9-11, ED12, and ED13+, with 0-8 years of schooling as reference group; (2) a dummy variable for completion of a formal occupational training program (Tr); (3) firm-specific on-the-job training measured by length of service with employer in years (FSOJT); (4) general on-the-job training in years (GOJT)--approximated by Age minus Years of Schooling minus 5;[32] (5) a dummy variable assigned a 1 if health does not limit kind or amount of work (Hlt); (6) a dummy variable for married with spouse present (Mar); (7) a dummy variable for residence in the South (S); and (8) two dummy variables for degree of urbanization in the local labor market--Urb1 for intermediate-sized city (200,000-699,999) and Urb2 for large urban area (700,000 or more); with rural, small town, or small city (less than 200,000) as the reference group.[33] The functional specification of the models estimated is as follows:

$$LME_{ij} = b_{ij0} + b_{ij1}\text{I-E} + \sum_{k=2}^{4} b_{ijk}Ed_k + b_{ij5}Tr + b_{ij6}FSOJT +$$

$$b_{ij7}GOJT + b_{ij8}Hlt + b_{ij9}Mar + b_{ij10}S + \sum_{l=11}^{12} b_{ijl}Urb_l + \mu_{ij}$$

where LMEij = the ith dimension of labor market experience (i=1,2,...,6) for the jth age-sex-race group (j=1,...,6); b_{ij0}, b_{ij1}, . . ., b_{ij12} = the intercept term and regression coefficients for the respective explanatory variables; μ_{ij} = the stochastic error term; and all other terms are as previously defined.

The general model specified above is derived from the human capital model of income distribution developed by Becker (1967) and Mincer (1970). In their model, earnings are a function of investments in productive skills and abilities; hence the investments comprise one's stock of human capital. By controlling for personal and demographic characteristics in the model, we are testing whether internal-external attitudes *add* to our understanding of the process of labor market attainment or whether they merely *reflect* human capital and demographic differences among workers which cause labor market attainment.

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[32] For the regressions on the older cohorts of men and women, a nonlinear form of the general on-the-job training variable is used to allow for the peaking and decline in earnings observed during the middle years in cross-sectional age-earnings profiles. Two dummy variables for Ages 53-57 and Ages 58-62 are used in the case of men to capture differences in general OJT in 1969, holding years of schooling constant, with Ages 48-52 as the reference group. In the case of women, two dummy variables are included for Ages 37-41 and Ages 42-46 in 1969, with Ages 32-36 as the reference group.

[33] In the NLS data, size of the local labor market is measured by the size of the labor force in the local labor market area rather than by the actual population.

To examine the extent to which multidimensionality of internal-external attitudes affects the findings, the empirical analysis outlined above has been repeated, substituting the personal control (PC) variable for the I-E measure. Scores on the control ideology (CI) factor have also been examined for their relationship to labor market experience by rerunning the regression equations using the CI variable as the relevant attitudinal measure. Finally, to compare more directly the relative importance and differential predictive abilities of the PC and CI factors, the regressions have also been rerun with both the personal control and control ideology variables included in the same analysis. Should these dimensions in fact be distinct and separate, as the Gurins have suggested, they should demonstrate distinct and separate effects when the intercorrelation between them has been statistically partialled out by the regression procedure.

The results of the regression analyses are presented by race in Table 4.2 for the younger men, in Table 4.3 for the older men, and in Table 4.4 for the older women. In each table the results show the "net" relationships, which statistically hold constant all of the control variables in the regression analysis, between each of the six aspects of labor market experience and: (1) the 11-item internal-external attitude measure (I-E) as a unidimensional variable; (2) the 4-item personal control measure (PC); (3) the 7-item control ideology measure (CI); (4) the 4-item personal control measure, when the 7-item control ideology measure has also been statistically controlled (PC/CI); and (5) the 7-item control ideology measure, when the 4-item personal control measure has also been statistically controlled for (CI/PC). In each case the relationships are presented in terms of "standardized" regression coefficients (Beta weights), to enable a comparison of "net" relationships with a particular aspect of work experience when the attitudinal measures are not comprised of the same number of items.

Taken as a whole, the data demonstrate that the payoffs which individuals ascribe to initiative are systematically related to their subsequent labor market experience. Consistent with the Gurin hypothesis, however, the payoffs that individuals ascribe to their own initiative have a substantially different meaning for their subsequent work experience than the payoffs they ascribe to the initiative of workers in general. Thus, the Gurin hypothesis has considerable merit and serious implications for the voluminous psychological literature on these attitudes. The distinction between the two types of perceptions appears particularly crucial for the younger men, about whom vastly different conclusions would be drawn depending upon the way in which these attitudes were measured. Furthermore, vastly different conclusions concerning the relative importance of initiative for whites and blacks would emerge depending upon the particular attitudinal dimension used.

For the young men the data in Table 4.2 show that the 11-item internal-external attitude scale is significantly related to average hourly earnings, occupational attainment, and to growth in hourly earnings among whites, and to only average hourly earnings among blacks. The implication is that racial discrimination reduces the effects of initiative for blacks. An examination of the results in columns (2) and (7), however, where only the four attitudinal items cast in the first person are used, reveals that those young white and

TABLE 4.2

REGRESSION RESULTS--STANDARDIZED REGRESSION COEFFICIENTS DEMONSTRATING SELECTED ASPECTS OF SUBSEQUENT LABOR MARKET EXPERIENCE AMONG YOUNG MEN BY RACE[a]

(t-ratios)

Aspect of work experience	Whites					Blacks				
	I-E	PC	CI	PC/CI	CI/PC	I-E	PC	CI	PC/CI	CI/PC
LnAHE	-.083 (-2.47)**	-.154 (-4.57)**	-.013 (-0.40)	-.174 (-4.78)**	.051 (1.44)	-.104 (-1.92)*	-.200 (-3.91)*	.001 (0.03)	-.208 (-3.99)**	.041 (0.78)
LnAE	-.015 (-0.44)	-.057 (-1.65)*	.017 (0.50)	-.074 (-1.99)*	.044 (1.22)	.071 (1.41)	-.011 (-0.18)	.097 (1.59)	-.030 (-0.49)	.103 (1.65)
OCC	-.054 (-1.75)*	-.096 (-3.11)**	-.011 (-0.37)	-.107 (-3.21)**	.029 (0.89)	-.057 (-1.09)	-.132 (-2.64)**	.016 (0.31)	-.140 (-2.75)**	.043 (0.83)
ΔAHE	-.080 (-2.13)*	-.103 (-2.71)**	-.043 (-1.17)	-.101 (-2.45)**	-.006 (-0.14)	-.044 (-0.72)	-.164 (-2.81)**	.053 (0.88)	-.180 (-3.04)**	.087 (1.45)
ΔAE	.006 (0.16)	-.006 (-0.15)	.012 (0.33)	-.012 (-0.30)	.017 (0.42)	.007 (0.12)	-.051 (-0.89)	.043 (0.75)	-.061 (-1.06)	.055 (0.94)
ΔOCC	-.029 (-0.83)	-.064 (-1.81)*	.002 (0.05)	-.076 (-1.97)*	.030 (0.79)	-.061 (-1.15)	-.116 (-2.25)*	-.001 (-0.03)	-.121 (-2.28)*	.022 (0.42)
N	739	739	739	739	739	250	250	250	250	250

[a] I-E represents the 11-item Internal-External Control Scale; PC the four items capturing the Personal Control factor; CI the seven items capturing the Control Ideology factor; PC/CI the results for the 4-item Personal Control factor when the Control Ideology factor has been statistically held constant in the regression analysis; and CI/PC the results for the 7-item Control Ideology factor when the Personal Control factor has been statistically held constant in the regression analysis.

*p < .05; **p < .01 (one-tailed tests).

TABLE 4.3

REGRESSION RESULTS--STANDARDIZED REGRESSION COEFFICIENTS DEMONSTRATING NET RELATIONSHIPS BETWEEN INTERNAL-EXTERNAL ATTITUDES AND SIX SELECTED ASPECTS OF SUBSEQUENT LABOR MARKET EXPERIENCE AMONG MIDDLE-AGED MEN BY RACE[a]

(t-ratios)

Aspect of work experience	Whites					Blacks				
	I-E	PC	CI	PC/CI	CI/PC	I-E	PC	CI	PC/CI	CI/PC
LnAHE	-.084 (-3.14)**	-.089 (-3.33)**	-.062 (-2.35)**	-.076 (-2.53)**	-.028 (-0.94)	-.076 (-1.76)*	-.073 (-1.69)*	-.055 (-1.28)	-.062 (-1.36)	-.036 (-0.79)
LnAE	-.121 (-4.71)**	-.114 (-4.40)**	-.098 (-3.86)**	-.086 (-2.96)**	-.060 (-2.10)*	-.189 (-4.27)**	-.176 (-3.98)**	-.139 (-3.13)**	-.146 (-3.16)**	-.094 (-2.02)*
OCC	-.106 (-4.15)**	-.121 (-4.72)**	-.074 (-2.92)**	-.109 (-3.79)**	-.025 (-0.88)	.061 (1.28)	.023 (0.48)	.067 (1.42)	.002 (0.04)	.067 (1.34)
ΔAHE	.021 (0.68)	-.026 (-0.82)	.043 (1.42)	-.058 (-1.65)*	.069 (2.01)	-.022 (-0.42)	-.083 (-1.62)	.026 (0.50)	-.101 (-1.87)*	.057 (1.06)
ΔAE	-.087 (-2.95)**	-.070 (-2.36)**	-.077 (-2.65)**	-.043 (-1.30)	-.058 (-1.78)*	-.107 (-2.05)	-.181 (-3.55)**	-.022 (-0.42)	-.193 (-3.59)**	.038 (0.70)
ΔOCC	-.031 (-1.02)	-.054 (-1.77)*	-.011 (-0.37)	-.061 (-1.79)*	.016 (0.48)	.125 (2.51)	.099 (2.00)	.103 (2.09)	.074 (1.42)	.080 (1.54)
N	1,087	1,087	1,087	1,087	1,087	394	394	(394)	(394)	(394)

[a] I-E represents the 11-item Internal-External Control Scale; PC the four items capturing the Personal Control factor; CI the seven items capturing the Control Ideology factor; PC/CI the results for the 4-item Personal Control factor when the Control Ideology factor has been statistically held constant in the regression analysis; and CI/PC the results for the 7-item Control Ideology factor when the Personal Control factor has been statistically held constant in the regression analysis.

*p < .05; **p < .01 (one-tailed tests).

TABLE 4.4

REGRESSION RESULTS--STANDARDIZED REGRESSION COEFFICIENTS DEMONSTRATING NET RELATIONSHIPS BETWEEN INTERNAL-EXTERNAL ATTITUDES AND SIX SELECTED ASPECTS OF SUBSEQUENT LABOR MARKET EXPERIENCE AMONG MATURE WOMEN BY RACE[a]

(t-ratios)

Aspect of work experience	Whites					Blacks				
	I-E	PC	CI	PC/CI	CI/PC	I-E	PC	CI	PC/CI	CI/PC
LnAHE	-.081 (-2.24)*	-.099 (-2.70)**	-.049 (-1.37)	-.095 (-2.33)**	-.009 (-0.23)	-.001 (-0.03)	-.051 (-1.03)	.026 (0.56)	-.079 (-1.44)	.059 (1.15)
LnAE	-.050 (-1.33)	-.015 (-0.40)	-.061 (-1.64)*	.014 (0.34)	-.067 (-1.63)	-.015 (-0.29)	-.073 (-1.34)	.020 (0.38)	-.102 (-1.69)*	.062 (1.10)
OCC	-.124 (-3.57)**	-.152 (-4.30)**	-.076 (-2.18)*	-.145 (-3.71)**	-.015 (-0.39)	.011 (0.24)	-.013 (-0.27)	.021 (0.48)	-.029 (-0.54)	.033 (0.68)
ΔAHE	-.003 (-0.59)	-.009 (-0.97)	-.001 (-0.19)	-.009 (-0.98)	.002 (0.25)	.004 (0.53)	.003 (0.20)	.006 (0.61)	-.002 (-0.09)	.006 (0.58)
ΔAE	.024 (0.57)	.057 (1.36)	-.004 (-0.11)	.072 (1.55)	-.035 (-0.76)	.056 (0.85)	-.031 (-0.45)	.091 (1.42)	-.093 (-1.22)	.129 (1.82)
ΔOCC	-.039 (-0.94)	-.104 (-2.48)**	.014 (0.34)	-.134 (-2.91)**	-.069 (-1.54)	-.007 (-0.11)	-.018 (-0.28)	.000 (0.01)	-.023 (-0.31)	.010 (0.15)
N	580	580	580	580	580	257	257	257	257	257

[a] I-E represents the 11-item Internal-External Control Scale; PC the four items capturing the Personal Control factor; CI the seven items capturing the Control Ideology factor; PC/CI the results for the 4-item Personal Control factor when the Control Ideology factor has been statistically held constant in the regression analysis; and CI/PC the results for the 7-item Control Ideology factor when the Personal Control factor has been statistically held constant in the regression analysis.

*p < .05; **p < .01 (one-tailed tests).

black men who perceive payoffs to their own initiative have greater hourly earnings, occupational attainment, growth in hourly earnings, and occupational advancement than comparable others.[34] In each case the standardized regression coefficients are considerably larger for blacks than whites. In addition, columns (3) and (8) of Table 4.2 show clearly that the seven attitudinal items cast in the third person, which ascertain the perceived payoffs to the initiative of workers in general, bear no relationship to any of the six aspects of subsequent work experience examined for either race group.

A careful examination of each of the three tables lends further support to the generalization that the payoffs an individual ascribes to his or her own initiative have a distinctly different meaning than the payoffs an individual ascribes to the initiative of others. When the results for the personal control (PC) and control ideology (CI) variables are compared, there is only one instance where the latter is significant and the former is not. There are at least twelve instances, however, where the perceived payoffs to one's own initiative (PC) are significant and the perceived payoffs to the initiative of workers in general (CI) are not. Additionally, when the intercorrelation between the two types of beliefs are statistically controlled for, there is little evidence that ascribing payoffs to the initiative of workers in general is of much motivational importance. Rather, what seems to matter most is what one perceives to be the payoffs to his or her own initiative.

Thus, the personal control factor more closely approximates Rotter's (1966) concept of internal-external attitudes, precisely as the Gurins have contended. Having failed to recognize the importance of the multidimensionality issue, it is possible that the vast majority of the psychological literature has produced biased and perhaps misleading estimates of the relationships between internal-external attitudes and the wide variety of behavioral and attitudinal variables with which these attitudes have been correlated.

VI. COMPLETE REGRESSION RESULTS: INTERNAL-EXTERNAL ATTITUDES AND SUBSEQUENT WORK EXPERIENCE

Since only the four items cast in the first person apparently capture the perceived payoffs to one's own initiative, the complete regression results are reported and discussed for only the cases where these four personal control items (PC) were used to measure internal-external attitudes. The complete regression results are presented for young men in Table 4.5, for the older men in Table 4.6, and for the women in Table 4.7. In all cases the samples are restricted to full-time wage and salary workers employed both at the beginning and end of the period. Among the youth, the sample also is restricted to those not enrolled in school during the period.

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[34] The correlation coefficient between the personal control factor and the control ideology factor is 0.401 among the young white men and 0.245 among the young black men, suggesting that the two attitudes are less likely to go hand in hand among black than white young men. Differences between these coefficients are statistically significant at a $p < .001$.

Results for Young Men

For whites and blacks alike, the regression coefficients appear of considerable magnitude in economic terms and exhibit little evidence of lower returns to the initiative of black youth. For five of the six dimensions of labor market experience examined among whites, and for four of the six dimensions among blacks, the net relationships are statistically significant at the 5 percent level or better. The data show that white and black young men with an "internal" outlook in 1968 were in the better occupations and had higher hourly earnings two years later. In the regressions which come closest to identifying a true causal relationship, those examining subsequent growth in earnings (ΔAHE and ΔAE) and occupational advancement (ΔOCC), internals of both race groups were also more likely to outdistance comparable externals both in terms of growth in hourly earnings and occupational advancement.

As for the magnitude of the relationships, those youth who were "slightly internal" in 1968, a score of 8 on the attitudinal measure, are estimated to have enjoyed a 12 percent differential in hourly earnings 2 years later over comparable youth who were "slightly external" in outlook, a score of 12. Also, their average hourly earnings are estimated to have advanced by $.20 per hour more between 1968 and 1970 than the wage rates of comparable youth who were "slightly external."

With respect to racial differences, there are only two cases where the regression coefficients differ between white and black youth. In the first, it appears that these attitudes are more strongly related to annual earnings 2 years later for whites than blacks. In the second, it appears that the attitudes are more strongly related to occupational advancement between 1968 1970 for blacks than whites.[35]

The only aspect of labor market experience examined that is not significantly related to the attitudinal variable for either race group is growth in annual earnings. Although the data do not address the issue directly, this may reflect greater investments (foregone earnings) that young "internals" have made in order to realize their advantage 2 years later in hourly earnings

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[35] Racial differences in the regression coefficients for the attitudinal measure are statistically significant at the 5 percent level in the case of ln AE, but insignificant in the case of ΔOCC.

TABLE 4.5

REGRESSION RESULTS FOR YOUNG MEN BY RACE

(t-ratios)

	lnAHE		lnAE		OCC		ΔAHE		ΔAE		ΔOCC	
Variable	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
PC	-.03	-.03	-.01	-.00	-1.0	-1.0	-.05	-.05	-8	-55	-.4	-.8
	(-4.57)**	(-3.91)**	(-1.65)*	(-.18)	(-3.11)**	(-2.64)**	(-2.71)**	(-2.81)**	(-.15)	(-.89)	(-1.81)*	(-2.25)*
Ed9-11	.20	.12	.15	.07	2.2	3.2	.20	.22	337	250	.6	3.8
	(3.68)**	(2.22)**	(2.12)*	(.67)	(.71)	(1.19)	(1.06)	(1.60)	(.58)	(.53)	(.26)	(1.49)
Ed12	.32	.12	.25	.31	11.4	5.5	.47	.15	448	1,116	6.3	5.6
	(5.56)**	(2.13)*	(3.49)**	(3.05)**	(3.51)**	(1.98)*	(2.37)**	(1.05)	(.73)	(2.24)*	(2.49)**	(2.16)*
Ed13+	.50	.29	.52	.48	35.3	35.1	.60	.55	1,554	1,834	13.0	29.4
	(7.79)**	(3.78)**	(6.48)**	(3.36)**	(9.60)**	(8.97)**	(2.64)**	(2.73)**	(2.21)*	(2.66)**	(4.29)**	(7.76)**
Tr	.05	.02	.06	.03	3.7	-.9	.15	-.01	202	-64	1.7	-.6
	(1.90)*	(.58)	(1.78)*	(.42)	(2.50)**	(.52)	(1.72)*	(-.15)	(.74)	(-.21)	(1.54)	(-.34)
FSOJT	-.00	.02	.02	.06	.8	1.1	-.04	.04	-109	169	.1	.4
	(-.07)	(2.34)**	(1.99)*	(3.56)**	(1.99)*	(2.27)*	(-1.74)	(1.78)*	(-1.45)	(2.03)*	(.44)	(.75)
GOJT	.03	-.01	.03	-.01	-.4	-.4	.01	-.03	-38	-52	-.4	-.1
	(4.64)**	(-1.22)	(3.89)**	(-.48)	(-1.42)	(-1.37)	(.55)	(-1.91)	(-.63)	(-.95)	(-1.72)	(-.24)
Hlt	.01	.13	-.00	.22	-.4	1.7	.09	.46	-113	1,177	.2	.6
	(.33)	(2.00)*	(-.07)	(1.86)*	(-.15)	(.51)	(.61)	(2.82)**	(-.25)	(2.12)*	(.10)	(.20)
Mar	.08	.02	.19	.02	3.2	-2.2	-.07	-.02	17	79	.6	-2.9
	(2.99)**	(.46)	(5.46)**	(.38)	(1.97)*	(-1.28)	(-.73)	(-.21)	(.05)	(.26)	(.46)	(-1.78)
S	-.10	-.31	-.10	-.14	5.1	-1.3	.01	-.41	-176	-683	3.4	.1
	(-3.60)**	(-6.63)**	(-2.95)**	(-1.69)*	(3.20)**	(-.55)	(.13)	(-3.09)**	(-.59)	(-1.65)*	(2.76)**	(.04)
Urb1	.10	.17	.04	.19	1.4	6.4	.35	.29	449	693	1.6	4.8
	(3.14)**	(4.03)**	(1.05)	(2.40)**	(.75)	(2.96)**	(3.09)**	(2.57)**	(1.31)	(1.87)*	(1.14)	(2.36)**
Urb2	.13	.04	.09	.12	5.2	1.4	.03	.09	223	368	1.9	1.2
	(3.66)**	(.65)	(2.13)*	(1.15)	(2.68)**	(.50)	(.24)	(.62)	(.61)	(.77)	(1.24)	(.46)
Constant	5.51	5.76	8.40	8.11	27.6	25.4	.71	1.78	2,846	3,323	11.7	16.8
	(58.48)**	(43.25)**	(71.35)**	(33.03)**	(5.16)**	(3.74)**	(2.13)*	(4.62)**	(2.86)**	(2.85)**	(2.77)**	(2.58)**
$\overline{R}^2$	.25	.41	.21	.17	.37	.43	.05	.23	.04	.27	.18	.40
F-ratio	21.39**	15.22**	17.40**	5.14**	37.76**	16.79**	3.68**	6.77**	3.18**	7.98**	13.08**	13.76**
N	739	250	739	250	739	250	739	250	739	250	739	250

*p < .05; **p < .01 (one-tailed tests).

TABLE 4.5

REGRESSION RESULTS FOR MIDDLE-AGED MEN BY RACE

(t-ratios)

Variable	lnAHE		lnAE		OCC		ΔAHE		ΔAE		ΔOCC	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
PC	-.02	-.01	-.02	-.03	-1.2	.1	-.01	-.02	-92	-123	-.3	.4
	(-3.33)**	(-1.69)*	(-4.40)**	(-3.98)**	(-4.72)**	(.48)	(-.82)	(-1.62)	(-2.36)**	(-3.55)**	(-1.77)*	(2.00)
Ed9-11	.08	-.03	.09	.03	3.9	3.0	-.01	-.06	-81	37	-.2	-1.7
	(2.76)**	(-.70)	(2.69)**	(.62)	(2.35)**	(1.46)	(-.01)	(-.60)	(-.31)	(.16)	(-.18)	(-1.19)
Ed12	.17	.05	.20	.11	12.9	12.1	.23	-.06	561	-114	3.0	4.2
	(5.89)**	(1.01)	(6.24)**	(1.86)*	(8.04)**	(5.27)**	(2.74)**	(-.59)	(2.22)*	(-.42)	(3.12)**	(2.59)**
Ed13+	.45	.21	.50	.29	31.7	24.3	.33	.38	1,770	434	5.1	3.1
	(13.78)**	(2.63)**	(13.80)**	(3.03)**	(17.6)**	(6.30)**	(3.13)**	(2.05)*	(5.76)**	(.92)	(4.25)**	(1.08)
Tr	.06	.13	.10	.06	6.0	3.8	.12	.04	680	319	.1	-.7
	(2.00)*	(2.47)**	(3.00)**	(1.00)	(3.79)**	(1.49)	(1.43)	(.30)	(2.76)**	(1.05)	(.13)	(-.38)
FSOJT	.01	.01	.01	.01	.3	.1	.00	.00	26	-7	.1	.1
	(6.14)**	(3.07)**	(7.73)**	(3.01)**	(5.74)**	(.70)	(.62)	(.44)	(3.09)**	(-.76)	(2.94)**	(1.21)
Ages 53-57	-.04	-.14	-.08	-.11	-.1	-2.9	.01	-.19	-94	-33	-.2	-.3
	(-1.74)*	(-3.93)**	(-3.13)**	(-2.44)**	(-.04)	(-1.63)	(.20)	(-2.26)*	(-.45)	(-.16)	(-.20)	(-.28)
Ages 58-62	-.06	-.12	-.09	-.07	-.7	-1.6	.01	-.11	-192	30	.1	.9
	(-2.18)*	(-2.46)**	(-2.80)**	(-1.25)	(-.43)	(-.71)	(.10)	(-1.01)	(-.76)	(.11)	(.07)	(.54)
Hlt	.06	-.01	.13	.06	2.2	-.3	.16	.03	578	110	.3	-1.5
	(1.96)*	(-.24)	(4.09)**	(1.06)	(1.44)	(-.15)	(1.92)*	(.32)	(2.38)**	(.42)	(.37)	(-1.00)
Mar	.09	.05	.21	.06	2.1	2.5	-.09	.00	422	163	-2.2	-.1
	(2.18)*	(1.31)	(4.54)**	(1.28)	(.89)	(1.22)	(-.77)	(.02)	(1.17)	(.68)	(-1.64)	(-.07)
S	-.08	-.26	-.06	-.24	4.6	2.0	-.01	-.07	13	-217	2.4	2.5
	(-3.24)**	(-6.49)**	(-2.11)*	(-5.07)**	(3.30)**	(1.03)	(-.17)	(-.74)	(.06)	(-.93)	(2.89)**	(1.89)*
Urb1	.13	.20	.12	.19	4.5	.6	.23	.10	140	272	1.4	.1
	(4.62)**	(4.81)**	(3.94)**	(3.85)**	(2.96)**	(.28)	(2.90)**	(1.02)	(.58)	(1.13)	(1.52)	(.09)
Urb2	.13	.17	.14	.18	1.3	2.3	.21	.11	381	206	.2	1.7
	(4.95)**	(3.72)**	(4.71)**	(3.38)**	(.88)	(1.06)	(2.78)**	(1.08)	(1.67)*	(.79)	(.27)	(1.15)
Constant	5.74	5.58	8.65	8.65	32.5	15.1	.62	.69	2,457	2,306	9.4	1.8
	(84.55)**	(62.82)**	(114.79)**	(81.71)**	(8.63)**	(3.53)**	(3.04)**	(3.05)**	(4.10)**	(4.22)**	(4.17)**	(.59)
$\bar{R}^2$	.29	.33	.38	.30	.35	.19	.04	.05	.14	.07	.10	.12
F-ratio	33.86**	14.47**	41.80**	12.36**	44.99**	6.81**	3.11**	1.40	11.96**	1.91*	8.41**	3.76**
N	1,087	394	1,087	394	1,087	394	1,087	394	1,087	394	1,087	394

*p < .05; **p < .01 (one-tailed tests).

TAPLE 4.7

REGRESSION RESULTS FOR MATURE WOMEN BY RACE

(t-ratios)

Variable	LnAHE		LnAF		OCC		ΔAHE		ΔAF		ΔOCC	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
PC	-.01	-.01	-.00	-.01	-1.2	-.1	-.01	.00	57	-22	-.4	-.0
	(-2.70)**	(-1.03)	(-0.40)	(-1.34)	(-4.30)**	(-0.26)	(-0.97)	(0.20)	(1.36)	(-0.45)	(-2.48)**	(-0.28)
ED 9-11	.15	.08	.16	-.05	13.2	6.1	.01	.05	290	-670	2.7	.8
	(3.12)**	(1.33)	(2.15)*	(-0.69)	(5.25)**	(2.03)*	(0.18)	(0.39)	(0.76)	(-1.90)*	(1.83)*	(0.51)
ED 12	.22	.15	.27	.07	22.6	16.9	.04	-.02	623	-526	4.6	3.8
	(4.97)**	(2.37)**	(3.79)**	(0.91)	(9.67)**	(5.66)**	(0.55)	(-0.16)	(1.75)*	(-1.46)	(3.12)**	(2.25)*
ED 13+	.39	.55	.62	.52	31.4	37.2	.13	.24	1900	755	4.5	7.4
	(7.55)**	(7.83)**	(7.41)**	(5.77)**	(11.34)**	(10.91)**	(1.38)	(1.62)	(4.33)**	(1.66)*	(2.47)**	(3.41)**
TR	.02	.05	.06	.06	5.2	8.6	-.01	.14	398	298	1.1	3.0
	(0.65)	(1.17)	(1.01)	(0.99)	(2.88)**	(3.81)**	(-0.26)	(1.61)	(1.45)	(1.12)	(0.99)	(2.44)**
PSOJT	.01	.01	.02	.02	.5	.5	-.00	-.00	-11	14	.0	.2
	(6.46)**	(3.54)**	(4.30)**	(3.36)**	(4.23)**	(3.06)**	(-0.14)	(-0.69)	(-0.60)	(0.63)	(0.73)	(1.62)
AGE 37-41	-.03	.03	-.10	-.06	-.2	-3.9	-.04	-.07	-330	-114	.8	.1
	(-0.96)	(0.59)	(-1.83)*	(-0.89)	(-0.14)	(-1.62)	(-0.62)	(-0.79)	(-1.18)	(-0.40)	(0.77)	(0.09)
AGE 42-46	-.05	.02	-.06	.0	-1.8	-1.2	-.08	.04	-405	111	-.1	-.8
	(-1.38)	(0.48)	(-1.06)	(0.00)	(-1.00)	(-0.51)	(-1.32)	(0.46)	(-1.50)	(0.41)	(-0.09)	(-0.62)
HLT	.07	.05	.16	.14	2.0	-.4	.04	-.02	472	227	-.5	1.2
	(1.76)*	(0.89)	(2.62)**	(1.72)*	(0.97)	(-0.15)	(0.54)	(-0.18)	(1.54)	(0.65)	(-0.41)	(0.73)
MAR	-.05	.02	-.11	-.01	-.3	1.5	-.02	-.00	-107	-137	.6	-.0
	(-1.74)*	(0.52)	(-2.43)**	(-0.21)	(-0.19)	(0.79)	(-0.37)	(-0.04)	(-0.45)	(-0.60)	(0.64)	(-0.04)
S	-.12	-.08	-.06	-.09	3.5	3.6	-.05	-.02	83	49	1.5	.3
	(-3.89)**	(-1.24)	(-1.20)	(-1.31)	(2.20)**	(1.34)	(-1.00)	(-0.23)	(0.34)	(0.16)	(1.60)	(0.22)
URB1	.09	.18	.10	.16	1.3	3.9	.08	.03	147	296	.3	-.4
	(2.83)**	(3.28)**	(1.93)*	(2.18)*	(0.77)	(1.47)	(1.54)	(0.24)	(0.57)	(0.91)	(0.30)	(-0.27)
URB2	.20	.34	.26	.26	5.7	7.2	.18	.22	575	500	1.0	1.3
	(5.72)**	(5.53)**	(4.64)**	(3.31)**	(3.09)**	(2.39)**	(3.04)**	(1.79)*	(2.04)*	(1.32)	(0.94)	(0.80)
CONSTANT	5.44	5.10	8.15	8.16	27.0	8.5	.36	.34	514	1928	6.7	.7
	(2.70)**	(37.33)**	(63.92)**	(46.25)**	(6.46)**	(1.29)	(2.49)**	(1.30)	(0.11)	(2.45)**	(2.64)*	(0.20)
R^2	.29	.53	.23	.43	.35	.57	.05	.08	.08	.10	.09	.17
F-RATIO	17.47**	21.28**	12.72**	14.12**	22.96**	24.79**	2.20**	1.60	3.58**	1.93*	4.44**	3.62**
N	580	257	580	257	580	257	580	257	580	257	580	257

*p < .05; **p < .01 (one-tailed tests).

and occupational attainment. Greater investments in job search and mobility, in particular, may explain why internals outdistanced comparable externals in growth in hourly earnings and in occupational advancement without exceeding their growth in annual earnings.

On the whole, the data strongly suggest that the attitudes and initiative of male youth are important factors in explaining differences in their labor market experience. While the elimination of racial differences in internal-external attitudes among youth apparently would only slightly reduce racial differences in their labor market experience, since there are only slight differences in these attitudes between black and white youth, the findings suggest that an attitudinal change among both white and black youth would result in greater initiative and more successful labor market experience during the crucial period of their accommodation to the labor market.

Results for Middle-Aged Men

As was also the case among male youth, the data show that internal-external attitudes bear a significant relationship to a number of aspects of subsequent labor market experience, independent of individual differences in the skills, abilities, and demographic characteristics held constant in the regression analyses. Furthermore, racial differences in the relationships between the attitudinal variable and each of the four economic aspects of labor market experience examined ($\ln AHE$, $\ln AE$, ΔAHE, and ΔAE) are not statistically significant at the 5 percent level. Thus, the data strongly suggest that initiative has economic returns during the middle-years as well as during youth, and that it pays off for blacks during the middle-years as well as for whites.

Initiative, however, appears to have considerably greater importance for occupational attainment and occupational advancement among whites than blacks during the middle-years. Internal-external attitudes are significantly related to each of these aspects of labor market experience among whites but to neither aspect among blacks. Moreover, racial differences in the relationships between internal-external attitudes and occupational attainment and advancement are statistically significant at the 1 percent level.

Among whites, the data show that middle-aged men with an "internal" outlook in 1969 experienced greater hourly earnings, annual earnings, and growth in earnings between 1969 and 1971, were in the better, higher status occupations in 1971, and experienced greater upward occupational mobility between 1969 and 1971. Furthermore, the whites who were "slightly internal" in 1969 are estimated to have enjoyed an 8 percent earnings differential, on both an hourly and an annual basis, over comparable individuals who were "slightly external" in outlook. They are also estimated to have advanced in earnings during the 1969-1971 period by nearly $400 more than comparable individuals who were "slightly external."

Among blacks, internals were also more likely to earn more than their external counterparts 2 years later, especially on an annual basis, and to have advanced more rapidly in annual earnings between 1969 and 1971 as well.

Those blacks who were "slightly internal" in 1969, for example, are estimated to have enjoyed a 12 percent annual earnings differential and a 4 percent hourly earnings differential over comparable blacks who were "slightly external" in outlook. They are also estimated to have advanced in earnings during the 1969-1971 period by nearly $500 more than comparable blacks who were "slightly external" in 1969. However, while initiative appears to have considerable economic returns for middle-aged black men, unlike their white counterparts and unlike young whites and blacks, the data suggest that their initiative has had little effect on access to the better occupations. The reduction of historical restrictions on the occupational entry of blacks during the late 1960's and early 1970's may, therefore, have been of considerably greater benefit to young blacks than to their middle-aged counterparts.

Overall, however, there is little consistency in the pattern of age differences in the relationships between these attitudes and the dimensions of labor market experience. Some evidence indicates that initiative paid off less in annual earnings and growth in annual earnings for the young than the middle-aged men, since young "internals" were possibly investing more in job search and mobility. With the exception of these regressions, however, there is little evidence that initiative had less payoff for the young. Particularly among blacks, the data suggest that young men during the late 1960's derived even greater benefits from their initiative than did their middle-aged counterparts during this same period.

Results for Women

Among white women in their thirties and forties, the data show that those who perceived payoffs to their initiative in 1969 tended to have higher hourly earnings two years later, tended to be in the better, higher status occupations, and were more likely than average to have advanced occupationally during the period. While the relationships in the cases of occupational attainment and occupational advancement do not differ appreciably in magnitude from what was reported for young and middle-aged men, the relationship between the attitude and hourly earnings appears weaker for women than for men. Those "slightly internal," for example, are estimated to have enjoyed a 4 percent differential in hourly earnings two years later, to have been 5 points higher in occupational status, and to have advanced in occupational status by about 1 and 1/2 points more than comparable women who were "slightly external" in outlook.

Unlike the findings for white men, however, there is no evidence of a systematic relationship between these attitudes and subsequent annual earnings or subsequent growth in earnings among the white women. Among blacks, differences in findings between men and women are even more substantial. The data not only suggest that the initiative of black women in their thirties and forties is less important for labor market success than the initiative of young or middle-aged black men, but also that the initiative of black women is less important than that of white women. Furthermore, there is no evidence whatsoever that the labor market rewards the initiative of black women in their thirties and forties.

The evidence does suggest that black women with some college training earn a considerable return for their schooling, in several cases more than that which accrues to white women or to middle-aged men, either black or white. College training among these black women has payoffs at least as great in terms of hourly earnings, annual earnings, and occupational status as it does among young white and black men. Black women with no college training generally do not fare as well, however, as race-sex differences in returns to schooling tend to be greatest among those with the least education.

VII. INTERNAL-EXTERNAL ATTITUDES AS AN OUTCOME OF WORK EXPERIENCE

To accomplish the third major objective of this chapter, both the extent and the correlates of change in scores on the 11-item measure of internal-external attitudes are explored among the NLS cohort of middle-aged men, as well as the extent and the correlates of change in scores on the 4-item and 7-item dimensions. To measure the extent of change, the correlation coefficients between 1969 and 1971 scores are used. To assess whether the observed changes in perceptions are related to labor market experience and to other environmental forces, the actual difference scores on:[36] (1) the 11-item measure of internal-external attitudes, (2) the 4-item personal control dimension, and (3) the 7-item control ideology measure have been regressed on several aspects of the respondents' situations and experience. These aspects include: (1) occupational attainment (1969), (2) occupational advancement (1969-1971), (3) hourly earnings (1969), (4) advancement in earnings (1969-1971), (5) voluntary change of employer (1969-1971), (6) involuntary change of employer (1969-1971), (7) years of schooling, (8) age, (9) region of residence, and (10) degree of urbanization in local labor markets.[37] The lower the score on each of the three change in attitude variables, the more internal a respondent's attitude became between 1969 and 1971.

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[36] Davidson (1972, Ch. 3) notes that where three conditions hold, the psychometric technique of "estimated true gain scores" does not order respondents any differently than raw difference scores of attitudinal measures. Estimated true gain scores were observed to be, if anything, inferior to raw difference scores in such cases. These three conditions include: (a) stability of the mean, (b) stability of the standard deviation, and (c) stability of the internal-consistency reliability estimate of the attitudinal measure over time. Since each of these conditions is met with this sample of middle-aged males (Andrisani and Nestel, 1975, pp. 225-227), raw difference scores were utilized in this analysis. Scores on the particular attitudinal variable at the beginning of the period (1969) also were statistically controlled in the analysis so as to control for the statistical artifact of regression toward the mean.

In a previous analysis of change in internal-external attitudes among middle-aged men, Andrisani and Nestel (1975) included a different inventory of explanatory variables in their regression equations. The particular aspects of the respondents' experience included here have been chosen to facilitate a comparison with the earlier findings and to ascertain whether conclusions are sensitive to the specification of the regression models. The analyses undertaken also extend the earlier work by stratifying the sample according to race, and by examining change in both the 4-item and 7-item dimensions of internal-external attitudes. It is possible, therefore, to gain insight into whether individuals change their perceptions of environmental control in light of changes in their personal circumstances and to determine whether the dimensions of internal-external attitudes respond differently to changes in circumstances within each racial subgroup.

While the cross-sectional evidence in Table 4.1 suggested that internal-external expectancies are relatively invariant with respect to age, the zero-order correlation coefficients between 1969 and 1971 scores among the middle-aged men are markedly lower than would be expected if there were no real change in perceptions. On the basis of the internal consistency reliability estimates of 0.75 for the 11-item measure in 1969 and in 1971,[38] scores on these items should be correlated to roughly this same degree if no real attitudinal change occurred. However, the correlation coefficients between 1969 and 1971 scores were only 0.57 for whites and 0.38 for blacks in this cohort.

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[37] Each of these aspects has been defined as follows: (1) occupational attainment by the Duncan (1961) Index of occupational status; (2) occupational advancement by the difference between the Duncan Index scores for the respondent's occupation in 1969 and 1971; (3) hourly earnings in actual dollar amounts; (4) advancement in earnings by the difference between average hourly earnings reported in 1969 and 1971; (5) voluntary change of employer by a variable assigned the value 1 if the respondent changed employers between 1969 and 1971 and reported in 1971 that it was a "voluntary" shift, and 0 if otherwise; (6) involuntary change of employer by a variable assigned the value 1 if the respondent changed employers between 1969 and 1971 and reported in 1971 that it was due to a layoff or discharge, and 0 if otherwise; (7) years of schooling by three dichotomous variables--Ed9-11, Ed12, and Ed13+, with 0-8 years of schooling as reference group; (8) age by two dichotomous variables for ages 53 to 57 and ages 58 to 62 in 1969, with ages 48 to 52 as reference group; (9) region of residence by a variable assigned the value 1 if a respondent resided in the non-South and 0 otherwise; and (10) degree of urbanization in the local labor market by two dichotomous variables for local labor markets with 200,000 to 699,999 workers and for local labor markets with 700,000 or more workers--with local labor markets with less than 200,000 workers as reference group.

[38] Reliability estimates have been calculated using the Kuder-Richardson Formula No. 8, since it involves perhaps the fewest assumptions of any internal consistency reliability estimate. Professor Robert J. Wherry of the Department of Psychology, The Ohio State University, suggested this procedure.

It also appears that scores on the personal control factor were more prone to change than scores on the control ideology factor, consistent with the Gurin hypothesis (Gurin, 1974; Gurin and Gurin, 1976). The correlations between 1969 and 1971 scores for the entire cohort were 0.43 for the personal control factor and 0.51 for the control ideology factor.[39]

The regression results are presented in Table 4.8 and show that the change which does occur tends to correlate with individual differences in circumstances, but more so for the personal control items than for the control ideology items. In particular, change in perceptions of personal control is significantly related at the 5 percent level to earnings, voluntary changes of employer, years of schooling, age, marital status, region of residence, and city size. In contrast, change in control ideology is significantly related to only occupational advancement and to marital status among the whites, and to only advancement in earnings, age, and years of schooling among blacks. Furthermore, the proportion of the variance in the change scores explained (adjusted R^2) is greatest for the regressions on change in personal control, despite the fact that, other things being equal, scales with fewer items generally contain more measurement error and therefore are more difficult to fit. Thus, as the Gurins have suggested, control ideology, being part of one's cultural heritage, appears less responsive to environmental circumstances than personal control.

Among white middle-aged men, the data show that those with high earnings, above-average schooling, in rural areas, in small urban areas, or in large urban areas were most likely to increase their sense of "personal control." Those whites who voluntarily made a change of employer, and those 58 to 62 years of age, were above-average as well in inclination to feel in greater control of their lives at the end of the two-year period than at the beginning. Among black middle-aged men, those 53 to 57 years of age and those residing in the South were more likely to express a greater sense of personal control at the end of the period than at the beginning. Those blacks who were married, however, apparently were below-average in this regard.

These findings, in conjunction with those examining the role of internal-external attitudes as a determinant of labor market experience, suggest that the payoffs individuals ascribe to their initiative both affect their behavior toward their environment and are affected by the environment. Moreover, they suggest that the early formation of external attitudes is not a shackle which precludes an individual from upward mobility. On the contrary, since the payoffs individuals ascribe to their efforts are apparently responsive to environmental forces, the evidence suggests that opportunities for success and success itself may be effective means for raising initiative to succeed.

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[39] Differences between these correlation coefficients are statistically significant at a $p < .001$ ($Z = 3.95$).

TABLE 4.8

REGRESSION RESULTS FOR MIDDLE-AGED MEN--REGRESSION COEFFICIENTS DEMONSTRATING NET RELATIONSHIPS BETWEEN SELECTED VARIABLES AND CHANGE IN INTERNAL-EXTERNAL ATTITUDES AND CHANGE IN ITS DIMENSIONS BY RACE

(t-ratios)

	Whites			Blacks		
Variable	I-E	Personal control	Control ideology	I-E	Personal control	Control ideology
Occupational attainment	-.01 (-1.40)	-.01 (-1.50)	-.01 (-1.51)	.01 (.63)	.00 (.38)	.01 (.68)
Occupational advancement	-.02 (-1.91)*	-.01 (-1.39)	-.02 (-1.88)*	.01 (,47)	-.01 (-.41)	.02 (1.18)
Hourly earnings	-.16 (-1.56)	-.09 (-1.95)*	-.09 (-1.18)	-.57 (-1.68)*	-.31 (-1.93)*	-.29 (-1.14)
Advancement in earnings	-.00 (-.56)	-.00 (-1.39)	.00 (.16)	-.01 (-1.69)*	-.00 (-1.07)	-.01 (-1.66)*
Voluntary change of employer	-.31 (-.43)	-.65 (-1.94)*	.28 (.52)	-.31 (-.19)	.14 (.18)	-.31 (-.25)
Involuntary change	-.53 (-.78)	.12 (.38)	-.67 (-1.32)	-1.64 (-.87)	-.76 (-.83)	-1.02 (-.73)
Years of schooling, 9-11	-1.09 (-2.64)***	-.74 (-3.89)***	-.49 (-1.62)	-1.26 (-1.75)*	-.82 (-2.36)**	-.58 (-1.07)
Years of schooling, 12	-.28 (-.69)	-.57 (-3.03)***	.11 (.37)	-3.02 (-3.54)***	-1.34 (-3.25)***	-1.82 (-2.86)***
Years of schooling, 13+	-.07 (-.13)	-.25 (-1.01)	.16 (.40)	-2.01 (-1.42)	-1.31 (-1.92)*	-.86 (-.82)
Age, 53-57	.39 (1.18)	.02 (.12)	.34 (1.37)	-1.97 (-3.19)***	-.55 (-1.84)*	-1.46 (-3.17)***
Age, 58-62	-.21 (-.54)	-.38 (-2.08)**	.11 (.39)	-1.95 (-2.40)**	-.84 (-2.14)**	-1.16 (-1.92)*
North	.39 (1.11)	.26 (1.60)	.08 (.30)	.78 (1.11)	.82 (2.39)**	.01 (.02)
Medium-size city	.47 (1.22)	.33 (1.86)*	.11 (.37)	.09 (.12)	.06 (.19)	-.06 (-.11)
Large city	-.53 (-1.43)	-.20 (-1.16)	-.28 (-1.04)	-.01 (-.01)	-.26 (-.71)	.24 (.42)
$\bar{R}^2$	.20	.29	.23	.33	.38	.35
F-ratio	12.39***	20.39***	14.40***	9.06***	10.69***	9.61***
N	1096	1096	1096	387	387	387

*p < .10; **p < .05; ***p < .01 (two-tailed tests).

As Andrisani and Nestel (1975) also noted, the tests of statistical significance are undoubtedly conservative. Inherent in the analysis of attitudinal change with micro data[40] are serious methodological difficulties which systematically understate the relationships observed and, at the same time, raise the standard errors of the estimates. Measurement error, which inevitably exists in the scores on the 11-item, 4-item, and 7-item scales, doubtless reduces our ability to fit the change in scores and causes understated relationships between actual experience and change in attitudes to be observed.

Since the proportion of measurement error is inversely related to the length of a scale, this problem should be relatively more serious with the 4-item scale for personal control than for the others. Also, the statistical artifact of "regression toward the mean" introduces further statistical difficulties which both lower the validity coefficients and raise the standard errors of the estimates (Davidson, 1972). The inevitably high degree of interdependence among the various explanatory variables included in the regressions also renders conservative the tests of statistical significance by biasing upward the standard errors of the parameter estimates.

Reinforcing these methodological difficulties are at least two theoretical considerations which also suggest that only a portion of the true relationship between work experience and change in attitude is likely to be observed. In the framework of Rotter's (1972, pp. 1-46) social learning theory, expectancies may theoretically change as unexpected events are experienced and also as a function of the amount of prior experience an individual has had in related situations.[41] Certain aspects of work experience during the 1969-1971 period for many workers, and particularly for men of this age group, were events which could be anticipated and for which there was considerable prior experience. To the extent that this was true for men in the sample, weaker relationships between experience and change in perceptions may exist than might be observed for other groups of workers -- e.g., youth and women. Youth and women not only would have less work experience on which to base their expectancies, but also might be considerably more susceptible to adverse labor market forces such as occurred between 1969 and 1971. Middle-aged males, in contrast, through strong seniority arrangements, may have been somewhat insulated from the full force of the economic downturn which occurred during that period.

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[40] That is, data in which individuals, rather than aggregates, are the units of analysis.

[41] In Rotter's words (1972, pp. 28-29): "Social learning theory has hypothesized that there are two general variables that operate to affect the size of expectancy changes.. . . With both positive and negative reinforcements, an unexpected occurrence has a greater effect than an expected one. . . . In other words, the occurrence of the . . . (event) must be of such a nature as to permit recategorization; otherwise, the person might simply regard its occurrence as random or specific to one situation only. . . . The second general variable affecting the size of expectancy changes is the number of previous experiences the subject has had in the situation."

The responsiveness of these attitudes to changes in work experience should not be overstated, however, as was probably done in the Andrisani and Nestel (1975) study. Their data on change in internal-external outlooks showed systematic relationships between these attitudes and occupational attainment, occupational advancement, advancement in annual earnings, unemployment experience, and movement into and out of the work force among middle-aged men, whose self-concepts may be more stable than those of any other age-sex cohort. The methodological and theoretical issues previously discussed led them to make a strong case for the hypothesis of attitudinal responsiveness to work experience. The more extensive data and empirical analysis presented here, however, suggest a more complex interrelationship than was previously apparent.

A comparison of the data in Table 4.8 with those presented by Andrisani and Nestel (1975, pp. 219-220) shows that the findings are sensitive to the inventory of explanatory variables included in the regression model. Apparently, controlling also for years of schooling, age, and voluntary mobility somewhat masks the relationship between work experience and attitudinal change. In addition, the multidimensional approach to internal-external attitudes taken here suggests that one's acceptance of a Protestant work ethic ideology is a relatively stable personality dimension.

Most importantly, the data in Table 4.1 show only the slightest trace of age, sex, or race differences in attitudes. While it is possible that these attitudes may change systematically over the course of the life cycle, particularly in response to changing work experience, it is doubtful that the vastly different labor market experiences of the eight age-sex-race groups could have substantially influenced these attitudes and yet have been offset entirely by other forces. It seems likely that the considerable differences in work experiences among these groups would have left some mark on the data if these attitudes respond systematically to work experience during adulthood. These reasons, as well as the fact that 72 percent of the whites and 65 percent of the blacks were reported by Andrisani and Nestel (1975, pp. 214-216) to have changed scores by 5 or fewer points on the 11-item scale during the 1969-1971 period, now lead to a more cautious conclusion on this issue than was justified by the data available to Andrisani and Nestel.

VIII. CONCLUSIONS

The principal purpose of this research has been to examine the role of a particular social psychological variable as both a contributor and an outcome in the dynamics of labor market experience. This variable, termed "internal-external" attitudes, is thought to capture the perceived payoffs to initiative and has therefore received considerable attention in the psychological literature as a generator of initiative. In particular, it has become a critical element in theories concerning poverty, especially poverty among blacks. The Coleman Report has found that "This attitude was more highly related to achievement than any other factor in the student's background or school." (Coleman, 1971, p. 193). Additionally, its close conceptual linkage to a dimension of alienation, that of perceived powerlessness, has given it a prominent place in several sociological theories (Seeman, 1972a; 1972c).

The data in this study show only very slight differences in these attitudes among the four cohorts that comprise the NLS. Little difference between whites and blacks in these attitudes within the four cohorts was seen. However, within five of the six age-sex-race groups for which it was possible to examine the relationship between these attitudes and subsequent labor market experience, there is strong and consistent evidence that individuals who perceive payoffs to their initiative subsequently experience greater economic success in the world of work. Confidence in these findings is strengthened by the fact that the observed relationships were independent of individual differences in a wide range of skills, abilities, and demographic characteristics, and were obtained on the basis of longitudinal data as well. Only among black women in their thirties and forties is there no evidence of these relationships.

While the elimination of age, sex, and race differences in these attitudes would do little to reduce age-sex-race differences in labor market experience, the data suggest, with the exception of black women, that attitudinal change among individuals with "external" outlooks would result in greater initiative and more successful labor market experience. This appears to be particularly true during the early stages of labor market careers. Furthermore, considerable evidence indicates that these attitudes represent stable personality dimensions, but there is reason to believe that the attitudinal change which occurs is nonrandom, even among middle-aged men, and that the initiative of workers could be influenced by public policy prescriptions.

Finally, the data in this study provide considerable support for the Gurin hypothesis concerning the multidimensionality of internal-external attitudes. Particularly among blacks and younger workers, the data point to the critical importance of distinguishing between workers' perceptions of the payoffs to their own initiative and their perceptions of the payoffs to the initiative of workers in general. While blacks may differ little from whites in either perception, those blacks who perceive payoffs to the initiative of workers in general are less inclined than their white counterparts to also perceive payoffs to their own initiative.

Insufficient attention to the multidimensional nature of these attitudes has been shown in this study to result in inaccurate conclusions concerning their relationship to work experience and their relative importance among demographic subgroups. It appears likely that most of the psychological literature on these attitudes, having failed to consider this issue, has produced biased estimates of their importance which may possibly result in misleading conclusions.

CHAPTER V

WORK ATTITUDES AND LABOR MARKET EXPERIENCE: OTHER FINDINGS

Paul J. Andrisani

I. INTRODUCTION

The principal purpose of this chapter is to examine the relationship between a number of work attitudes, other than job satisfaction and internal-external locus of control, and work experience. First, the chapter examines how individuals within the four NLS cohorts felt about a variety of aspects of work during the 1966-1971 period. Second, the chapter examines the relationship between work attitudes held at the initial survey date and subsequent labor market experience over the next 2 to 5 years. It explores, for instance, whether attitudinal differences among otherwise comparable individuals in one period -- e.g., differences in career aspirations, expectations of attaining career goals, "tastes" for economic versus noneconomic rewards, commitment to work, attitudes toward one's work role, attitudes toward the propriety of working mothers, and spouse's attitude toward one's work role -- are related to such experiences as turnover, unemployment, withdrawal from the work force, and occupational and earnings advancement in the next period. Third, the chapter examines the extent to which some of these work attitudes have been shaped by one's work experience. With respect to each of these objectives, age, sex, and race differences in findings are explored.

II. RESPONSES TO ATTITUDINAL QUESTIONS

Responses to a number of attitudinal questions asked at the initial survey date are presented in Table 5.1. When respondents who were in the labor force were asked whether they would continue to work if by some chance they were to get enough money to live comfortably without working, 73-78 percent of the older men, 78-82 percent of the younger men, 58-68 percent of the older women, and 59-70 percent of the younger women replied that they would continue to work. Among the men, blacks were 4-5 percentage points less likely than whites to respond similarly, while black women were 10-11 points more likely than whites to respond similarly. The absence of age differences in commitment to work is consistent with the data in chapters three and four, in which there was little evidence of a changing work ethic.[1] The presence of sex differences in work commitment is also consistent with responses to other attitudinal questions.

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[1] In chapter three, while there was some increased interest in intrinsic work rewards during the period and some age differences in aspects of work disliked most within several of the NLS demographic groups, there was little to suggest that a major change in work ethic had occurred. Similarly, in chapter four there were virtually no age differences in the holding of a strong Protestant work ethic belief that hard work leads to success. Thus there, too, was little evidence of an intergenerational change in work ethic.

TABLE 5.1

RESPONSES TO SELECTED WORK ATTITUDES AT INITIAL SURVEY DATE: BY AGE, SEX, AND RACE

	Men 45-59		Men 14-24		Women 30-44		Women 14-24	
Work Attitude	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
Committed to work	78%	73%	82%	78%	58%	68%	59%	70%
Plan to marry, keep house, and raise family at age 35	a	a	a	a	a	a	64%	35%
Plan to work at age 35	a	a	a	a	a	a	23%	43%
Plan to work in 1972	a	a	a	a	50%	67%	a	a
Would stay home if current job were lost	a	a	a	a	27%	8%	a	a
Unfavorably disposed toward mothers working if:								
a) it is absolutely necessary	a	a	a	a	6%	8%	9%	9%
b) she desires and husband agrees	a	a	a	a	25%	16%	33%	17%
c) she desires but husband disagrees	a	a	a	a	85%	72%	87%	78%
Husband opposed to wife's working	a	a	a	a	19%	21%	22%	22%
Occupational aspirations	a	a	55	46	a	a	53	48
Aspirations 2-3 years later	a	a	55	46	a	a	54	49
Chances of attaining career goals "fair" at best	a	a	29%	37%	a	a	a	a
Wages more important than liking work	19%	52%	15%	42%	9%	31%	12%	33%

[a] Data were not available. Attitudes described more fully in text.

While chapter four showed little reason to suspect that women perceived less payoffs to their initiative than men, or that they were less strongly attached to the Protestant work ethic, questions from the initial surveys probing the women's future plans for work in the market show a goodly number, particularly among the whites, do not intend to continue working steadily. Sixty-four percent of the young white women, for example, planned to be married, keeping a house, and raising a family at age 35 rather than working. Similarly, only one-half of their older counterparts planned to be working in 1972. Among black women, however, 43 percent of the younger cohort planned to be working at age 35 and 67 percent of their older counterparts planned to be working in 1972. Furthermore, 27 percent of the white working women 30 to 44 years of age in 1967 reported that they would stay at home, rather than look for work, if they were to lose their job, and all women, regardless of race or age, held somewhat conservative attitudes toward the propriety of mothers working. More than 85 percent of the whites and more than 72 percent of the blacks in each cohort, for example, were unfavorably disposed toward mothers working if their husbands were opposed, regardless of how the mothers themselves felt about working. Within each of the four NLS groups of women, roughly 20 percent of those who were married and in the labor force perceived their husbands as somewhat opposed to their working. On the whole, therefore, women appear less committed to work than men, and black women appear more committed and liberal in their attitudes toward working mothers than white women.

With respect to their occupational goals, young men and women aspired to considerably greater occupational heights than either they or their older counterparts had attained. Two to three years later, as the youths aged and gained more work experience, occupational aspirations in the aggregate changed little for white or black, male or female youth. Yet 29 percent of the young white men and 37 percent of the young black men perceived their chances of attaining their goals as "fair" at best. Racial differences in aspirations were also substantial among young men and women, but the gap between aspirations and actual occupational attainment was much greater for black youth than white youth. Relative to their actual occupational attainment, therefore, or relative to the occupational attainment of their counterparts in the older cohorts, black youth aspired to greater heights than white youth.[2] Within race groups, however, young men and women 14 to 24 years of age differed little on the average in their occupational goals.

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[2] Coded in terms of the Duncan (1961) Index of occupational status, white boys in 1966 aspired to occupations averaging 55 points (on a scale from 0 to 100), while black boys aspired to occupations averaging only 46 points. Aspirations on average were unchanged for either group in 1969. Among the young women, whites in 1968 aspired to jobs averaging 53 points, while blacks aspired to jobs averaging 48 points. Two years later, by 1970, each group's aspirations had risen by a single point. Of the youth who worked at each survey date, and who were not enrolled in school, the actual occupational attainments of the white and black men were 32 and 19 points respectively, at the first survey date, and 44 and 30 points respectively for white and black young women. Of those employed in the two older cohorts at each survey date, the actual occupational attainments of the white and black men were 40 and 18 points respectively, and 43 and 29 points respectively for white and black women.

Finally, when asked whether "wages" or "liking the work" was the more important aspect of a good job, better than half within nearly every group responded "liking the work." Blacks, however, were 2 and 1/2 to 3 times more likely than whites to state an economic preference, and men were more motivated than women by economic rewards. Although the younger women appear slightly more "extrinsically" oriented than the older women, younger men appear somewhat more "intrinsically" oriented than their older counterparts, particularly the black youth. While the basic finding that "liking the work" is quite important to most workers is consistent with the findings in chapter three, the age-sex-race differences in preferences are not entirely consistent with those observed in chapter three, where only the employed respondents were asked to state what they liked best about their "actual," as opposed to an "ideal," job. Nonetheless, it seems clear in both sets of findings that workers are interested in noneconomic as well as economic, intrinsic as well as extrinsic work rewards, regardless of age, sex, or race.

III. WORK ATTITUDES AND SUBSEQUENT WORK EXPERIENCE

Discussion of Methods

The data for this portion of the study consist of those members of the four NLS cohorts who were employed full-time as wage or salary workers at the initial survey dates. For the two cohorts of youth, the sample is further restricted to only those who were not enrolled in school. In all cases, work attitudes at the initial survey date are used to examine relationships with work experiences that occurred from the time of the first survey to the time of the last survey for which data were available.[3] The method of analysis is multiple regression analysis.

To control for individual differences among workers in skills, abilities, and demographic characteristics, and to examine whether relationships vary by age, sex, or race, separate regression equations have been estimated for each of the eight age-sex-race groups, with seven dimensions of labor market experience (LME) regressed on the measures of worker attitudes (WA) and a number of control variables. The control variables in each regression include:[4] (1) three variables assigned the value 1 or 0 for years of schooling completed -- ED9-11, ED12, and ED13+, with 0-8 years of schooling as the reference group; (2) a variable assigned a 1 or 0 for completion of a formal occupational training program (TR); (3) a continuous variable for firm-specific on-the-job training captured by length of service with employer in years (FSOJT); (4) a continuous variable for general on-the-job training measured in years

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[3] For further detail concerning the initial survey dates and the length of the period for which data were available from the NLS, see chapter two, footnote 3.

[4] Each control variable is measured as of the same date as the work attitude measure, the initial survey date.

(GOJT);[5] (5) a variable assigned a 1 or 0 capturing whether health limits either the kind or amount of work performed (H); (6) a dichotomous variable for marital status (M);[6] (7) a dichotomous variable for residence in the South (S); and (8) two dichotomous variables for degree of urbanization in the local labor market: one for residence in a central city SMSA (URB 1), the other for residence in an SMSA, but not a central city (URB 2), with non-SMSA (RURAL) as the reference group.

The functional specification of the models estimated therefore may be presented as follows:

$$LME_{ij} = b_{ij0} + b_{ij1}WA + \sum_{k=2}^{4} b_{ijk}ED_k + b_{ij5}\,TR + b_{ij6}\,FSOJT$$

$$+ b_{ij7}GOJT + b_{ij8}H + b_{ij9}M + b_{ij10}S + \sum_{m=11}^{12} b_{ijm}Urb_m + \mu_{ij}$$

where LME_{ij} = the ith dimension of labor market experience examined for the jth age-sex-race group; $b_{ij0}, b_{ij1}, \ldots, b_{ij12}$ = the intercept term and regression coefficients for the respective explanatory variables; μ_{ij} = the stochastic error term; and all other terms are as previously defined. By controlling for schooling and training, as well as for the additional personal and demographic characteristics in the model, we are testing whether knowledge of workers' attitudes adds to our understanding of the dynamics of labor market experience or whether these attitudes merely reflect human capital and demographic differences among workers that give rise to labor market experience.

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[5] For the two cohorts of youth, general on-the-job training is approximated as follows: Age - Years of Schooling - 6. For the two older cohorts, however, this variable was constructed in nonlinear form to allow for the peaking and decline in earnings observed during the middle-years in age-earnings profiles. For the older men, two dichotomous variables for ages 50-54 and 55-59 are used to capture differences in general OJT, holding years of schooling constant, with ages 45-49 as the reference group. For the cohort of older women, analogously, two dichotomous variables are also used: namely, one for those ages 35-39 and another for those 40-44, with those 30-34 as the reference group. In addition, another variable also was included in the analysis for the older women to capture the proportion of the years since they had left school that they had worked six months or more.

[6] For the two cohorts of women, the marital status variable has been elaborated somewhat to capture also the presence of children in the household who were not of school age.

The seven dimensions of subsequent labor market experience (LME) examined in the regression analyses have been defined operationally as follows: (1) turnover by a variable assigned the value 100 if the respondent made a change of employer during the course of the period examined and 0 otherwise;[7] (2) change in occupational status by the difference in scores on the Duncan (1961) Index of occupational status reported at the initial survey and at the last survey for which data were available;[8] (3) change in earnings by two continuous variables capturing change in hourly wage during the course of the period and change in annual earnings during the period,[9] each measured in dollar amounts; (4) unemployment by three dependent variables capturing experience during the entire period--the first by a continuous variable measuring the actual number of weeks of unemployment reported; the second by a variable assigned the value 100 if the respondent incurred a spell of unemployment during the period and 0 otherwise; and the third by a continuous variable measuring the duration of unemployment during the period for those persons who had at least one spell of unemployment; (5) labor force participation by three dependent variables capturing experience throughout the entire period--the first by a continuous variable measuring the actual number of weeks during which the respondent neither worked nor looked for work; the second by a variable assigned the value 100 if the respondent reported a spell during which he or she had withdrawn from the work force; and the third by a continuous variable measuring the length of time out of the labor force among those respondents who reported a period during which they had withdrawn from the work force; (6) training by a variable assigned the value 100 if a formal occupational training program had been completed during the course of the period and 0 otherwise; and

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[7] The sample for these particular regressions is restricted to only those respondents who were employed at the end of the period. Thus, those workers who withdrew from the work force by the end of the period will not show up as turnover. Furthermore, only in the cases of the young women and middle-aged men does turnover pertain to "voluntary" changes of employer.

[8] In the regressions on change in occupational status, individual differences in occupational status at the beginning of the period have been controlled for in order to eliminate the potential bias that may result from "regression toward the mean." For these particular regressions the sample is further restricted to only those respondents who were employed at the last survey date, for whom it was possible to make a comparison of occupations over the course of the period.

[9] In the regressions on change in earnings, individual differences in the specific dimensions of earnings (hourly versus annual) at the beginning of the period have been controlled for in order to eliminate the potential bias that may result from "regression toward the mean." For the regressions on change in hourly earnings, the analysis has been performed for only those respondents who were also employed at the last survey date. This restriction on the sample was necessary because wage rates were only reported for those employed at the survey date.

(7) geographic mobility by a variable assigned the value 100 if the respondent changed residence to a different county or SMSA during the period and 0 if no change was reported.

The work attitudes that are available from the initial interviews of the four NLS cohorts include: work commitment and preferences for noneconomic versus economic rewards among the middle-aged men[10]; occupational aspirations, expectations for attaining occupational goals, and preferences for noneconomic versus economic rewards among the young men[11]; attitude toward one's work role, attitude toward the propriety of mothers working, spouse's attitude toward one's work role, commitment to work, attachment to employer, and preferences for noneconomic versus economic rewards among the older women[12]; and attitude toward the propriety of mothers working, commitment to work, and preferences for noneconomic versus economic rewards among the young women.[13]

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[10] These attitudes have been measured as follows: work commitment by a dummy variable assigned the value 1 if the respondent stated that he would "continue working" even if he received enough money to live comfortably without working, and 0 if otherwise; preferences for noneconomic rewards by a dummy variable assigned a 1 if the respondent stated that "liking the work" is a more important consideration than "wages," and 0 if otherwise.

[11] These attitudes have been measured as follows: (1) occupational aspirations by the Duncan (1961) Index score of the occupation to which the respondent aspired; (2) expectations for attaining goals by a variable assigned a 1 if the youth saw his chances for attaining his aspirations as "excellent," 2 if "good," 3 if "fair," and 4 if "poor"; and (3) preferences for noneconomic rewards by a dummy variable coded in the same manner as for the middle-aged men (see footnote 10).

[12] These attitudes have been measured as follows: (1) attitude toward one's work role by a variable (BDHOMAT) assigned a 1 if the woman stated that she liked housework "very much," 2 if she liked it "somewhat," 3 if she was "undecided," 4 if she disliked it "somewhat," and 5 if she disliked it "very much"; (2) attitude toward the propriety of mothers working (GDWOMAT) by an index ranging from 3 to 15 in terms of an increasingly favorable attitude toward mothers working; (3) spouse's attitude toward one's work role by a variable (BDHUSAT) ranging from 1 to 5 in terms of an increasingly unfavorable husband's attitude toward his wife's working (with nonmarried women coded as a 1); (4) commitment to work by three dummy variables, the first (WKCOM1) measured in the same manner as for the men (see footnote 10), the second (WKCOM2) assigned a 1 if the woman definitely planned to be working five years later and 0 if otherwise, and the third (WKCOM3) assigned a 1 if the woman stated that she would "take another job" or "look for work" if she were to lose her job and 0 if otherwise; (5) attachment to employer by a dummy variable (LONGTEN) assigned a 1 if the woman expected to remain with her 1967 employer "5 years or longer," or "as long as I can," and 0 if otherwise; and (6) preferences for noneconomic rewards by a dummy variable (INTRIN) measured in the same manner as for the men (see footnote 10).

For both cohorts of men and for the younger women, since there were no more than three work attitudes, all of the attitudinal variables for the particular age-sex-race group and for a particular dependent variable have been included in the same regression equation. For the older women, however, since there were eight attitudinal variables, the regressions were performed with only one attitudinal variable included at one time.

Results for Middle-Aged Men

The regression results for middle-aged men are presented by race in Table 5.2 for work commitment and in Table 5.3 for preferences for noneconomic rewards. In columns 2 and 4 of each table are reported the results of regressions that have been rerun also holding constant occupational status at the initial survey date, measured in terms of the Duncan (1961) Index. This permits us to ascertain the extent to which the relationships observed stem from an occupational advantage at the beginning of the period among those with a particular attitude.

The numbers are regression coefficients expressing the "net" relationships between the work attitude reported at the beginning of the period and each dimension of subsequent labor market experience. Each relationship is "net" because individual differences in educational attainment, formal occupational training, firm-specific on-the-job training, general on-the-job training, health, marital status, region of residence, and degree of urbanization in local labor markets have been statistically controlled for. Each coefficient expresses a longitudinal relationship since the work attitude has been measured prior to the occurrence of the aspects of labor market experience.

Below each regression coefficient in parentheses is its t-ratio, the formal test of statistical significance of the coefficient. Taken literally the regression coefficients estimate the effect of a 1-point increase in the attitude on the dependent variable in question. Since the "committed" and those who prefer noneconomic rewards are 1 point higher on the attitudinal measure than the "noncommitted" and those who prefer economic rewards, differences in each aspect of subsequent labor market experience between the two groups may be estimated by the particular regression coefficient.

The data in Table 5.2 show that the highly committed subsequently advanced more in hourly earnings, were less likely to encounter a spell of unemployment or to spent time out of the labor force, and were more likely

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[13] These attitudes were measured as follows: attitude toward the propriety of mothers working by a variable measured in the same manner as for the older women (see footnote 12); and commitment to work and preferences for noneconomic rewards measured in the same manner as for the men (see footnote 10).

TABLE 5.2

REGRESSION RESULTS--THE EFFECTS OF COMMITMENT TO WORK IN 1966 ON THE 1966-1971 WORK EXPERIENCE OF WHITE AND BLACK MIDDLE-AGED MEN[a]

(t-ratios)

Aspect of 1966-1971 work experience	Whites		Blacks	
	Controlling for		Controlling for	
	Skills and demographics	Skills, demographics, and occupation	Skills and demographics	Skills, demographics, and occupation
Change in occupational status	0.90 (1.14)	0.90 (1.14)	-1.08 (-1.06)	-1.08 (-1.06)
Change in hourly earnings	0.10 (1.72)*	0.09 (1.10)	0.04 (0.49)	0.01 (0.17)
Change in annual earnings	132.68 (0.64)	44.33 (0.22)	199.23 (0.99)	114.84 (0.57)
Weeks of unemployment	-0.08 (-0.13)	-0.03 (-0.06)	0.49 (0.43)	0.62 (0.54)
Susceptibility to unemployment	-4.50 (-2.21)**	-4.12 (-2.03)**	0.25 (0.07)	0.65 (0.19)
Weeks of unemployment (for those with some unemployment)	3.55 (1.36)	3.29 (1.25)	2.17 (0.59)	2.25 (0.61)
Weeks out of the labor force	-6.38 (-3.66)***	-6.29 (-3.60)***	-6.33 (-2.26)**	-6.11 (-2.18)**
Susceptibility to withdrawal from the work force	-6.22 (-2.40)**	-5.43 (-2.11)**	-1.85 (-0.46)	-1.47 (-0.37)
Weeks out of the labor force (for those with some weeks)	-9.31 (-2.55)**	-9.31 (-2.55)**	-7.70 (-1.39)	-7.58 (-1.36)
Voluntary change of employer	5.08 (2.53)**	5.36 (2.66)***	3.58 (1.15)	3.55 (1.14)
Received training	4.49 (2.16)**	3.91 (1.89)*	1.22 (0.52)	0.76 (0.33)
Geographic mobility	-1.90 (-1.36)	-2.12 (-1.51)	-0.20 (-0.17)	-0.20 (-0.16)
Number of sample cases[b]	2,520	2,520	1,061	1,061

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[a] The sample includes male respondents 45 to 59 years of age in 1966 who were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 5.3

REGRESSION RESULTS—THE EFFECTS OF PREFERENCES FOR NONECONOMIC REWARDS IN 1966 ON THE 1966-1971 WORK EXPERIENCE OF WHITE AND BLACK MIDDLE-AGED MEN[a]

(t-ratios)

Aspect of 1966-1971 work experience	Whites		Blacks	
	Controlling for		Controlling for	
	Skills and demographics	Skills, demographics, and occupation	Skills and demographics	Skills, demographics, and occupation
Change in occupational status	0.39 (0.48)	0.39 (0.48)	-0.39 (-0.43)	-0.39 (-0.43)
Change in hourly earnings	0.02 (0.24)	-0.01 (-0.13)	0.03 (0.46)	0.01 (0.10)
Change in annual earnings	319.17 (1.46)	252.90 (1.17)	56.15 (0.31)	-20.32 (-0.11)
Weeks of unemployment	-1.82 (-2.70)***	-1.74 (-2.60)***	-0.93 (-0.88)	-0.77 (-0.73)
Susceptibility to unemployment	-3.54 (-1.64)*	-3.03 (-1.41)	-5.08 (-1.64)*	-4.40 (-1.41)
Weeks of unemployment (for those with some unemployment)	-5.24 (-2.00)**	-5.30 (-2.02)**	-0.37 (-0.11)	-0.51 (-0.15)
Weeks out of the labor force	0.45 (0.24)	0.56 (0.30)	-0.16 (-0.06)	0.09 (0.03)
Susceptibility to withdrawal from the work force	2.44 (0.89)	3.38 (1.24)	7.83 (2.15)**	8.20 (2.24)**
Weeks out of the labor force (for those with some weeks)	-1.80 (-0.45)	-1.96 (-0.49)	-6.46 (-1.30)	-6.02 (-1.21)
Voluntary change of employer	1.50 (0.72)	1.70 (0.82)	-0.46 (-0.17)	-0.30 (-0.11)
Received training	3.43 (1.55)	2.83 (1.28)	3.59 (1.68)*	2.98 (1.40)
Geographic mobility	1.89 (1.27)	1.69 (1.14)	0.25 (0.23)	0.24 (0.22)
Number of sample cases[b]	2,520	2,520	1,061	1,061

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[a] The sample includes male respondents 45 to 59 years of age in 1966 who were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

to make a voluntary change of employer and to receive formal training during the next 5 years than comparable workers less highly committed to work. Except for the relationship between work commitment in 1966 and weeks out of the labor force between 1966 and 1971, these findings only hold for the white middle-aged men. Furthermore, the findings do not appear to reflect any tendency among committed workers to be in the more prestigious occupations, other things being equal, since the regression coefficients are virtually unchanged when occupational differences are statistically held constant.

In Table 5.3, the results suggest that middle-aged men who preferred economic rewards in 1966, both black and white, subsequently were more prone to unemployment, but not as a result of any greater propensity to voluntarily change employers. Among black men, the data also show that those more interested in noneconomic rewards were more likely to experience a period of time out of the labor force, although they were more likely to receive formal occupational training. The differences in the regression coefficients between columns 1 and 2 and between columns 3 and 4 suggest further that these results are not due to any tendency among those with noneconomic preferences to be in different occupations than those men with preferences for economic rewards, other things held equal.

Results for Young Men

The regression results for male youth are presented by race in Tables 5.4, 5.5, and 5.6. The first table reports the net relationships between occupational aspirations in 1966 and the various selected aspects of subsequent labor market experience over the 1966-1969 period. The second table reports the results for the attitude "expectancy for success," i.e., the youths' perceptions of their chances for attaining their occupational goals. The third table reports the results for the attitude "preferences for noneconomic versus economic rewards." In columns 2 and 4 of each table the results are reported for regressions in which occupational differences at the beginning of the period have been adjusted for.

The data in Table 5.4 show that white and black male youth with greater aspirations in 1966 advanced more in annual earnings over the next three years than comparable youth who were less ambitious. Among whites, however, the greater advancement in annual earnings stems mainly from the fact that the more ambitious youth were in the higher status jobs initially. The greater annual earnings advancement of the more ambitious black youth does not derive from any such initial advantage and we thus may be more confident that the longitudinal relationship reflects the effect of the attitude on the behavior. Among the white youth, occupational aspirations are also related to occupational advancement, to advancement in hourly rates of pay, to the reception of formal occupational training, and to fewer weeks of unemployment. Among the black youth, the more ambitious were more inclined to receive formal occupational training, but there is no evidence that they were more likely to advance occupationally, or in wage rates, or that they were any less likely to encounter unemployment.

TABLE 5.4

REGRESSION RESULTS--THE EFFECTS OF OCCUPATIONAL ASPIRATIONS IN 1966 ON SELECTED ASPECTS OF 1966-1969 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG MEN[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites: Controlling for Skills and demographics	Whites: Controlling for Skills, demographics, and occupation	Blacks: Controlling for Skills and demographics	Blacks: Controlling for Skills, demographics, and occupation
Change in occupational status	0.15 (4.68)***	0.15 (4.68)***	0.06 (1.35)	0.06 (1.35)
Change in hourly earnings	0.01 (2.86)***	0.00 (0.93)	0.00 (1.54)	-0.01 (-1.89)*
Change in annual earnings	9.59 (1.80)*	-1.75 (-0.30)	19.47 (2.64)***	16.52 (2.24)**
Weeks of unemployment	-0.03 (-2.52)**	-0.02 (-1.40)	-0.01 (-0.16)	0.00 (0.00)
Susceptibility to unemployment	-0.10 (-1.29)	0.04 (0.44)	0.36 (2.18)**	0.40 (2.41)**
Weeks of unemployment (for those with some unemployment)	-0.08 (-2.19)**	-0.07 (-1.76)*	-0.09 (-1.43)	-0.10 (-1.49)
Weeks out of the labor force	0.02 (0.65)	0.05 (1.67)*	-0.04 (-0.89)	-0.05 (-1.02)
Susceptibility to withdrawal from the work force	0.06 (0.71)	0.10 (1.06)	0.16 (1.02)	0.12 (0.75)
Weeks out of the labor force (for those with some weeks)	-0.02 (-0.51)	0.02 (0.34)	-0.15 (-1.76)*	-0.14 (-1.62)
Received training	0.24 (3.34)***	0.14 (1.77)*	0.18 (1.70)*	0.15 (1.36)
Geographic mobility	0.05 (0.81)	-0.00 (-0.03)	0.11 (1.20)	0.09 (0.94)
Number of sample cases[b]	1,199	1,199	490	490

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[a] The sample includes male respondents 14 to 24 years of age in 1966 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 5.5

REGRESSION RESULTS--THE EFFECTS OF EXPECTANCY FOR SUCCESS IN 1966 ON SELECTED ASPECTS OF 1966-1969 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG MEN[a]

(t-ratios)

	Whites		Blacks	
	Controlling for		Controlling for	
Aspect of 1966-1969 work experience	Skills and demographics	Skills, demographics, and occupation	Skills and demographics	Skills, demographics, and occupation
Change in occupational status	-2.29 (-3.25)***	-2.29 (-3.25)***	-2.50 (-2.89)***	-2.50 (-2.89)***
Change in hourly earnings	-0.22 (-4.99)***	-0.17 (-3.70)***	-0.08 (-1.46)	-0.07 (-1.41)
Change in annual earnings	-440.35 (-3.59)***	-275.48 (-2.17)**	-374.35 (-2.40)**	-382.06 (-2.48)**
Weeks of unemployment	1.16 (3.78)***	0.99 (3.10)***	1.30 (1.75)*	1.25 (1.66)*
Susceptibility to unemployment	6.97 (3.87)***	5.18 (2.77)***	1.59 (0.48)	0.81 (0.24)
Weeks of unemployment (for those with some unemployment)	1.35 (1.60)	1.11 (1.28)	2.68 (1.91)*	2.84 (2.00)**
Weeks out of the labor force	1.79 (3.11)***	1.41 (2.36)**	0.14 (0.14)	0.17 (0.17)
Susceptibility to withdrawal from the work force	0.62 (0.31)	-0.03 (-0.01)	-6.33 (-1.93)*	-5.86 (-1.78)*
Weeks out of the labor force (for those with some weeks)	3.65 (3.44)***	2.95 (2.60)***	2.43 (1.45)	1.99 (1.12)
Received training	-1.09 (-0.65)	0.46 (0.26)	-0.55 (-0.24)	0.38 (0.17)
Geographic mobility	2.92 (-1.97)**	-2.13 (-1.37)	-0.60 (-0.30)	-0.10 (-0.05)
Number of Sample cases[b]	1,199	1,199	490	490

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[a] The sample includes male respondents 14 to 24 years of age in 1966 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 5.6

REGRESSION RESULTS--THE EFFECTS OF PREFERENCES FOR NONECONOMIC REWARDS IN 1966 ON SELECTED ASPECTS OF 1966-1969 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG MEN[a]

(t-ratios)

Aspect of 1966-1969 work experience	Whites		Blacks	
	Controlling for		Controlling for	
	Skills and demographics	Skills, demographics, and occupation	Skills and demographics	Skills, demographics, and occupation
Change in occupational status	1.23 (0.83)	1.23 (0.83)	-0.26 (-0.15)	-0.26 (-0.15)
Change in hourly earnings	-0.13 (-1.28)	-0.16 (-1.60)	0.02 (0.21)	0.04 (0.41)
Change in annual earnings	2.15 (0.01)	-115.51 (-0.42)	2.55 (0.01)	88.34 (0.29)
Weeks of unemployment	-0.19 (-0.28)	-0.13 (-0.19)	-2.11 (-1.39)	-2.19 (-1.42)
Susceptibility to unemployment	-4.65 (-1.16)	-4.10 (-1.02)	-0.13 (-0.02)	0.68 (0.10)
Weeks of unemployment (for those with some unemployment)	0.66 (0.35)	0.81 (0.43)	-4.04 (-1.51)	-4.19 (-1.55)
Weeks out of the labor force	-0.39 (-0.30)	-0.32 (-0.25)	2.19 (1.10)	2.45 (1.21)
Susceptibility to withdrawal from the work force	-4.06 (-0.90)	-3.41 (-0.75)	3.29 (0.49)	3.59 (0.53)
Weeks out of the labor force (for those with some weeks)	-0.16 (-0.07)	-0.11 (-0.05)	2.77 (0.77)	4.78 (1.30)
Received training	5.84 (1.57)	5.32 (1.43)	1.99 (0.44)	0.90 (0.20)
Geographic mobility	6.90 (2.10)**	6.57 (2.00)**	-4.19 (-1.07)	-5.88 (-1.54)
Number of sample cases[b]	1,199	1,199	490	490

---

[a] The sample includes male respondents 14 to 24 years of age in 1966 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

The results in Table 5.5 reinforce these findings by showing that white and black male youth who were confident that they would attain their career goals had considerably greater subsequent success in the labor market during this transitional period from school to work. Those black and white youth who perceived their chances as excellent in 1966, for example, a score of 1 on the attitude scale, advanced occupationally from 7 to 8 points more (on the Duncan Index) over the next three years than comparable youth who initially rated their chances as "poor." In addition, their annual earnings advancement over the next three years exceeded that of those less confident by $825 to $1150, and the confident youth experienced 3 to 4 fewer weeks of unemployment as well. Among the white youth, the more confident youth also had considerably greater advancement in wage rates, fewer weeks out of the labor force, and were more prone to be geographically mobile. With respect to none of the findings in this table, perhaps with the exception of geographic mobility, is there reason to suspect that any initial occupational advantage of those with more self-confidence had any appreciable bearing on the results.

In Table 5.6, the results suggest that the preferences of male youth in 1966 for economic or noneconomic rewards had virtually no influence on their 1966-1969 labor market experience, holding other things equal. Only among whites is even a single statistically significant relationship observed: those preferring economic rewards were less likely to move geographically than those youth preferring noneconomic rewards. Nonetheless, taken as a whole, the findings in these tables suggest clearly that the attitudes of male youth, particularly their career goals and their confidence in their ability to attain them, have a considerable impact on their subsequent labor market experience. While elimination of racial disparities in aspirations and expectations apparently would not eliminate the vast differences in labor market experience between white and black male youth during this critical period of accommodation to the work force, the data clearly suggest that it would have a substantial positive impact.

Results for Older Women

The regression results for the older cohort of women are presented in Tables 5.7 and 5.8. Among white women who worked, the attitude most consistently related to subsequent work experience is the women's perception of their husbands' attitude toward their working (BDHUSAT). Those women who perceived their husbands as highly opposed to their working, for example, were less likely to advance occupationally, advanced less in annual earnings ($760), had 3 weeks more of unemployment, were 8 percentage points more likely to encounter a spell of unemployment, had 9 more weeks out of the labor force, and were 9 percentage points less likely to complete formal occupational training than comparable women who perceived their husbands as having a very favorable attitude toward their working. Surprisingly, there is no relationship between this attitude and subsequent work experience among black women who worked.

Although space does not permit a presentation of the regression results in which differences in occupational status are also taken into account, those regressions show that white women whose husbands were unfavorably

TABLE 5.7

REGRESSION RESULTS--THE EFFECTS OF WORK-RELATED ATTITUDES ON THE 1967-1971 WORK EXPERIENCE OF WHITE WOMEN[a]

(t-ratios)

Aspect of 1967-1971 work experience	BDHOMAT	GDWOMAT	BDHUSAT	WKCOM1	WKCOM2	WKCOM3	LONGTEN	INTRIN
Change in occupational status	c	-0.25 (-1.74)*	-0.62 (-1.76)*	c	c	c	c	c
Change in hourly earnings	0.08 (2.79)***	c	c	c	c	0.15 (2.19)**	0.11 (1.67)*	c
Change in annual earnings	215.97 (2.30)**	c	-189.34 (-2.00)**	c	671.62 (2.86)***	560.90 (2.37)**	657.38 (2.95)***	c
Weeks of unemployment	c	c	0.95 (2.98)***	c	c	c	c	c
Susceptibility to unemployment	c	c	2.14 (1.80)*	c	c	c	c	-8.70 (-2.79)***
Weeks of unemployment (for those with some unemployment)	2.19 (1.85)*	c	2.06 (1.90)*	-5.01 (-1.95)*	c	c	c	c
Weeks out of the labor force	c	c	2.37 (2.08)**	c	c	-11.39 (-4.08)***	-9.18 (-3.45)***	c
Susceptibility to withdrawal from the work force	c	c	c	c	c	-6.96 (-2.02)**	-9.08 (-2.77)***	c
Weeks out of the labor force (for those with some weeks)	c	c	3.79 (2.12)**	c	c	-14.54 (-3.44)***	-8.94 (-2.21)**	c
Change of employer	c	c	c	c	c	c	-14.80 (-4.27)***	-7.73 (-2.02)**
Received training	c	c	-2.28 (-2.34)**	6.01 (2.26)**	c	5.48 (1.83)*	c	c
Geographic mobility	c	c	c	c	c	c	-6.39 (-3.35)***	c
Number of sample cases[b]	944	944	944	944	944	944	944	944

[a] The sample includes white female respondents 30 to 44 years of age in 1967 who were employed as wage and salary workers. In each case the relationships are net of individual differences in education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

[c] Relationship not statistically significant at a $p < .10$ (two-tailed test).
$*p < .10$; $**p < .05$; $***p < .01$ (two-tailed tests).

TABLE 5.8

REGRESSION RESULTS--THE EFFECTS OF WORK-RELATED ATTITUDES ON THE 1967-1971 WORK EXPERIENCE OF BLACK WOMEN[a]

(t-ratios)

Aspect of 1967-1971 work experience	BDHOMAT	GDWOMAT	BDHUSAT	WKCOM1	WKCOM2	WKCOM3	LONGTEN	INTRIN
Change in occupational status	c	c	c	c	c	3.02 (2.10)**	c	c
Change in hourly earnings	0.12 (3.13)***	c	c	c	c	c	c	0.20 (2.36)**
Change in annual earnings	199.85 (1.74)*	c	c	401.14 (1.79)*	c	c	c	387.62 (1.76)*
Weeks of unemployment	c	c	c	c	c	c	c	c
Susceptibility to unemployment	-3.66 (-1.85)*	c	c	c	9.60 (1.92)*	c	c	c
Weeks of unemployment (for those with some unemployment)	c	c	c	c	c	8.63 (1.73)*	c	c
Weeks out of the labor force	-3.83 (-2.08)**	c	c	c	c	-13.99 (-2.75)***	c	c
Susceptibility to withdrawal from the work force	c	c	c	c	c	-13.49 (-2.15)**	8.81 (1.87)*	c
Weeks out of the labor force (for those with some weeks)	-6.80 (-2.41)**	c	c	c	c	c	c	c
Change of employer	c	c	c	c	-10.14 (-2.01)**	c	-12.28 (-2.56)**	c
Received training	5.28 (2.70)***	c	c	c	-10.63 (-2.52)**	c	-13.71 (-3.45)***	c
Geographic mobility	c	c	c	c	c	c	c	c
Number of sample cases[b]	433	433	433	433	433	433	433	433

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[a] The sample includes black female respondents 30 to 44 years of age in 1967 who were employed as wage and salary workers. In each case the relationships are net of individual differences in education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

[c] Relationship not statistically significant at a $p < .10$ (two-tailed test).
*$p < .10$; **$p < .05$; ***$p < .01$ (two-tailed tests).

disposed toward their working tended disproportionately to be in the lower paying and lower status jobs at the beginning of the period. The initial disparities in occupations account for the observed relationship between husbands' attitudes and advancement in earnings, the likelihood of encountering a spell of unemployment, and completion of training. They do not, however, account for the findings concerning occupational advancement, weeks of unemployment, or weeks out of the labor force.

Other work attitudes strongly and consistently related to the subsequent labor market experience of working women include attitudes toward work in the home (BDHOMAT), work commitment (WKCOM2 and WKCOM3), attachment to employer (LONGTEN), and preferences for noneconomic rewards (INTRIN). Among whites, women highly indisposed toward housekeeping advanced \$.32 per hour more in hourly earnings and \$865 more in annual earnings than comparable women with highly favorable attitudes toward housekeeping. Among blacks the differences were \$.48 and \$800, respectively. Additionally, black women with highly unfavorable attitudes toward housekeeping were 15 percentage points less likely to encounter a spell of unemployment, spent nearly 4 months more time in the labor force over the next four years, and were 21 percentage points more likely to complete a training program than comparable women with a highly favorable attitude. Furthermore, occupational differences at the beginning of the period among working women, both black and white, are not responsible for these findings.

Working women who reported they would continue to work even if they received enough money to live comfortably without working (WKCOM1), subsequently advanced more in annual earnings (black women), and were somewhat more likely to complete a training program (white women). Those who in 1967 planned to work in 1972 (WKCOM2) advanced nearly \$700 more in annual earnings (white women). Among blacks, however, such women were 10 percentage points more likely to encounter unemployment, but 10 percentage points less likely to change employers or complete training. The most important of the three work commitment measures is apparently the third (WKCOM3), wherein working women were asked if they would continue to work if for some reason they were to lose their job. Among the whites, those who reported they would do so advanced \$.15 per hour more in hourly earnings, \$560 more in annual earnings, had nearly 3 fewer months out of the labor force, and were more likely to complete training over the next four years than comparable working women less firmly committed to work. Among blacks, the more committed had greater occupational advancement as well. Moreover, there is little evidence that these relationships are attributable to occupational differences among working women at the beginning of the period.

Among white and black working women, those highly attached to their 1967 employer were 12 to 15 percentage points less likely to make a job shift over the next four years than comparable women less highly attached. Among the whites, the highly attached also advanced \$.11 more per hour and \$657 more per year over the 1967-1971 period, had fewer weeks out of the work force, and were less likely to be geographically mobile. These relationships were not observed among blacks, however, but the highly attached black women were less likely to receive training and more likely to have spent some time out of the work force. For neither whites nor blacks is there much evidence that these relationships stem from occupational differences among working women.

White women who worked in 1967 and 1971, and who were favorably disposed toward the propriety of mothers working, were slightly less likely to advance occupationally during the 1967-1971 period. There is no other evidence that this attitude bore any relationship to subsequent labor market experience among either white or black women. Finally, white working women who preferred economic to noneconomic rewards in 1967 were more likely to encounter unemployment and to change employers between 1967 and 1971 than comparable women who preferred economic rewards. Among their black counterparts, however, economic preferences were related to below average growth in annual and hourly earnings. There is little evidence that these relationships are attributable to occupational differences among working women.

In sum, the data clearly demonstrate that the attitudes women held in 1967 influenced their subsequent labor market experience. The fact that these relationships are longitudinal and are net of individual differences in a wide range of skills, abilities, and demographic characteristics--including occupational differences--makes the findings all the more impressive. Even more impressive, however, is the fact that the exclusion from these regressions of women who were not working may possibly have reduced the observed relationships between the work attitudes of women and their subsequent labor market experience.

Results for Younger Women

The regression results for the younger women are presented by race in Tables 5.9, 5.10, and 5.11. The first table shows that white young women who worked and held liberal attitudes toward the propriety of mothers working spent fewer weeks out of the work force over the next 2 years than comparable women with more conservative attitudes. Among blacks, the more liberal the attitude the more likely the woman was to change residence to a different county (SMSA) over the next several years. Commitment to work and preferences for noneconomic rewards also tended to bear few systematic relationships to subsequent work experience. Among whites, the more committed the young woman to work, the more likely she was to receive training but the lower her subsequent growth in hourly earnings. Among blacks, the more committed the woman the more likely she was to advance occupationally and the less likely to spend time out of the work force. These relationships, furthermore, appear to be unrelated to any occupational differences that might exist between the committed and uncommitted young women.

IV. WORK EXPERIENCE AND CHANGING WORK ATTITUDES

In chapters three and four, several relationships between work experience and changing work attitudes have been considered, with changes in job satisfaction and internal-external attitudes comprising the relevant work attitudes. In Chapter VII, the relationship between work experience and changes in another work attitude, intrinsic versus extrinsic preferences, is examined.

TABLE 5.9

REGRESSION RESULTS--THE EFFECTS OF ATTITUDES TOWARD THE PROPRIETY OF MOTHERS WORKING ON THE 1968-1970 WORK EXPERIENCE OF WHITE AND BLACK YOUNG WOMEN[a]

(t-ratios)

	Whites		Blacks	
	Controlling for		Controlling for	
Aspect of 1968-1970 work experience	Skills and demographics	Skills, demographics, and occupation	Skills and demographics	Skills, demographics, and occupation
Change in occupational status	-0.01 (-0.06)	-0.12 (-0.59)	0.22 (0.47)	0.06 (0.15)
Change in hourly earnings	-0.01 (-0.86)	-0.01 (-0.67)	-0.01 (-0.46)	-0.00 (-0.27)
Change in annual earnings	-15.70 (-0.59)	-10.04 (-0.37)	7.82 (0.19)	7.51 (0.18)
Weeks of unemployment	0.09 (1.40)	0.06 (1.01)	0.03 (0.17)	0.03 (0.18)
Susceptibility to unemployment	0.59 (1.07)	0.47 (0.84)	0.40 (0.33)	0.37 (0.31)
Weeks of unemployment (for those with some unemployment)	0.14 (0.67)	0.07 (0.32)	0.04 (0.11)	0.09 (0.23)
Weeks out of the labor force	-0.78 (-2.19)**	-0.77 (-2.14)**	-0.13 (-0.21)	-0.14 (-0.21)
Susceptibility to withdrawal from the work force	-0.84 (-1.42)	-0.84 (-1.40)	1.53 (1.51)	1.52 (1.49)
Weeks out of the labor force (for those with some weeks)	-0.65 (-1.47)	-0.63 (-1.40)	0.76 (1.02)	-0.69 (-0.91)
Change of employer	0.96 (1.31)	0.98 (1.33)	-0.45 (-0.30)	0.37 (0.24)
Received training	-0.38 (-0.67)	-0.37 (-0.67)	0.59 (0.59)	0.59 (0.59)
Geographic mobility	-0.67 (-1.21)	-0.72 (-1.28)	1.84 (2.17)**	1.75 (2.07)**
Number of sample cases[b]	900	900	318	318

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[a] The sample includes female respondents 14 to 24 years of age in 1968 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p<.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 5.10

REGRESSION RESULTS--THE EFFECTS OF COMMITMENT TO WORK IN 1968 ON SELECTED ASPECTS OF 1968-1970 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG WOMEN[a]

(t-ratios)

Aspect of 1968-1970 work experience	Whites: Controlling for Skills and demographics	Whites: Controlling for Skills, demographics, and occupation	Blacks: Controlling for Skills and demographics	Blacks: Controlling for Skills, demographics, and occupation
Change in occupational status	0.45 (0.32)	0.31 (0.24)	5.45 (2.68)***	5.47 (2.95)***
Change in hourly earnings	-0.13 (-2.10)**	-0.12 (-1.89)*	0.11 (1.40)	0.11 (1.44)
Change in annual earnings	-165.95 (-0.96)	-123.57 (-0.72)	256.83 (1.31)	245.40 (1.27)
Weeks of unemployment	0.10 (0.24)	-0.04 (-0.09)	-0.76 (-0.88)	-0.76 (-0.88)
Susceptibility to unemployment	0.89 (0.24)	-0.06 (-0.02)	-4.76 (-0.83)	-5.03 (-0.87)
Weeks of unemployment (for those with some unemployment)	0.24 (0.17)	0.11 (0.08)	-0.98 (-0.51)	-0.84 (-0.43)
Weeks out of the labor force	-1.95 (-0.82)	-2.19 (-0.92)	-5.05 (-1.65)*	-4.93 (-1.60)
Susceptibility to withdrawal from the work force	-3.10 (-0.79)	-3.64 (-0.92)	-3.75 (-0.78)	-3.83 (-0.79)
Weeks out of the labor force (for those with some weeks)	0.64 (0.22)	0.70 (0.23)	-5.56 (-1.55)	-5.83 (-1.60)
Change of employer	2.10 (0.44)	2.12 (0.45)	-1.01 (-0.15)	-1.02 (-0.15)
Received training	8.34 (2.35)**	8.41 (2.35)**	5.91 (1.23)	6.37 (1.33)
Geographic mobility	-3.97 (-1.07)	-4.53 (-1.22)	-5.34 (-1.32)	-5.51 (-1.38)
Number of sample cases[b]	900	900	318	318

---

[a] The sample includes female respondents 14 to 24 years of age in 1968 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects of work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

TABLE 5.11

REGRESSION RESULTS--THE EFFECTS OF PREFERENCES FOR NONECONOMIC REWARDS ON SELECTED ASPECTS OF 1968-1970 WORK EXPERIENCE AMONG WHITE AND BLACK YOUNG WOMEN[a]

(t-ratios)

Aspect of 1968-1970 work experience	Whites: Controlling for Skills and demographics	Whites: Controlling for Skills, demographics, and occupation	Blacks: Controlling for Skills and demographics	Blacks: Controlling for Skills, demographics, and occupation
Change in occupational status	0.74 (0.40)	1.73 (1.03)	1.30 (0.57)	1.86 (0.88)
Change in hourly earnings	0.03 (0.41)	0.02 (0.21)	0.20 (2.23)	0.19 (2.15)**
Change in annual earnings	30.92 (0.14)	-14.86 (-0.07)	30.57 (0.14)	6.88 (0.03)
Weeks of unemployment	-0.25 (-0.49)	-0.25 (-0.51)	0.28 (0.31)	0.30 (0.32)
Susceptibility to unemployment	1.15 (0.25)	0.91 (0.20)	-3.09 (-0.50)	-3.30 (-0.53)
Weeks of unemployment (for those with some unemployment)	-1.76 (-0.99)	-1.84 (-1.05)	1.90 (0.99)	2.07 (1.08)
Weeks out of the labor force	1.94 (0.66)	2.43 (0.82)	-0.18 (-0.06)	-0.07 (-0.02)
Susceptibility to withdrawal from the work force	2.85 (0.58)	3.27 (0.67)	-10.26 (-1.97)**	-10.16 (-1.96)**
Weeks out of the labor force (for those with some weeks)	1.42 (0.39)	1.92 (0.52)	3.25 (0.89)	3.52 (0.95)
Change of employer	1.39 (0.23)	1.25 (0.20)	-11.09 (-1.48)	-11.38 (-1.52)
Received training	6.99 (1.60)	6.96 (1.58)	-1.66 (-0.32)	-2.00 (-0.39)
Geographic mobility	3.15 (0.68)	4.03 (0.87)	-3.80 (-0.87)	-4.20 (-0.98)
Number of sample cases[b]	900	900	318	318

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[a] The sample includes female respondents 14 to 24 years of age in 1968 who were not enrolled in school and were employed as wage and salary workers. In each case skills and demographics refer to education, training, health, tenure, work experience, marital status, region of residence, and city size. For a complete description of all variables and their units of measurement see text.

[b] Actual sample sizes in some cases include fewer respondents due to further sample restrictions for particular aspects fo work experience examined.

*p <.10; **p <.05; ***p <.01 (two-tailed tests).

The only attitudes considered in the present chapter for which it was possible to measure attitudinal changes over time are occupational aspirations. At the time of the present study, occupational aspirations of the young men were available from the 1966 and 1969 NLS surveys.

To examine the extent to which work experience between 1966 and 1969 is related to changing attitudes over the same period, changes in occupational aspirations among the young men have been regressed on changes in their occupational status and hourly earnings. In addition, to assure that comparable youth are being considered, control variables are also included in the regressions to adjust for individual differences at the beginning of the period in occupation, hourly earnings, years of schooling, completion of formal occupational training, years of general on-the-job training, years of service with 1966 employer, health status, marital status, region of residence, degree of urbanization in the local labor market, occupational aspirations, work commitment, and preferences for noneconomic versus economic rewards. All explanatory variables are defined in the same manner as detailed earlier in this chapter, with changing aspirations measured by subtracting scores on the aspiration scale in 1966 from the respondents' scores in 1969. These regression results are presented by race in Table 5.12.

Among white and black young men, as previously noted, there was virtually no change in occupational aspirations, on the average, between 1966 and 1969, despite the fact that many youth crossed the critical threshold from school to work during the period. For young men who were employed as wage and salary workers and not enrolled in school during the 1966-1969 period, the subset of the total cohort included in the regressions in Table 5.12, aspirations on the average changed by only two-thirds of one point among the white youth and by less than one-twentieth of one point among the black youth. Nonetheless, as was also observed in chapter four where internal-external attitudes among middle-aged men were shown to change little on the average, there is evidence that more favorable work experience leads to more favorable work attitudes. Among both race groups, for example, those in the better occupations initially, and those who advanced the most occupationally during the period, aspired to greater occupational heights in 1969 than in 1966. Furthermore, among black youth, those in the better paying jobs initially, and those whose earnings grew the most during the period, became more ambitious in career objectives between 1966 and 1969. The influence of earnings is so strong, in fact, that those black youth who differed initially or in growth in earnings by $1, differed in changes in their aspirations by 5.5 and 3.4 points respectively. There is no evidence, however, that initial earnings or changes in earnings had any influence on changes in aspirations among the white youth.

Other variables also related to changing aspirations include years of work experience, health, and suburban residence. The longer the youth had been out of school in 1966, the less likely he was to revise his aspirations upward. Among blacks, those with a health problem in 1966, whose career goals at that point may have been seriously in doubt, raised their aspirations by 14 points more than comparable youth with no health limitation in 1966. Among whites, those residing in suburban areas raised their aspirations by 3 points more than white youth residing in rural or central city locations. There is

TABLE 5.12

REGRESSION RESULTS--THE RELATIONSHIP BETWEEN WORK EXPERIENCE AND CHANGE IN OCCUPATIONAL ASPIRATIONS, 1966-1969, AMONG YOUNG MEN: BY RACE[a]

(t-ratios)

Explanatory Variable	Whites	Blacks
Change in occupational status, 1966-1969	0.5	0.5
	(11.33)***	(4.34)***
Change in hourly earnings, 1966-1969	0.0	3.4
	(0.66)	(1.70)*
Occupational status, 1966	0.4	0.3
	(8.94)***	(2.10)**
Hourly earnings, 1966	-0.0	5.5
	(-0.80)	(2.40)**
9-11 years of schooling	-1.6	1.4
	(-0.59)	(0.28)
12 years of schooling	0.1	4.6
	(0.05)	(0.84)
13+ years of schooling	-0.7	1.0
	(-0.18)	(0.13)
Completed formal training, 1966	-0.3	-4.2
	(-0.18)	(-1.13)
Years of work experience, 1966	-1.1	-1.6
	(-2.97)***	(-2.41)**
Length of service with employer, 1966	0.1	0.0
	(0.36)	(0.00)
Health limits work, 1966	-1.6	13.9
	(-0.75)	(2.81)***
Married spouse present, 1966	2.1	-1.8
	(1.46)	(-0.59)
South, 1966	-1.4	0.2
	(-0.95)	(0.06)
Central city residence, 1966	0.8	3.8
	(0.48)	(1.13)
Urban residence, not central city, 1966	3.2	3.5
	(2.04)**	(0.72)
Aspirations, 1966	-0.7	-0.8
	(-19.59)***	(-11.78)***
Expectancy for success, 1966	0.8	-0.9
	(1.03)	(-0.59)
Noneconomic preferences, 1966	0.1	2.38
	(0.08)	(0.82)
Constant	21.81	17.82
	(4.94)***	(1.71)*
$\bar{R}^2$	0.47	0.58
F-ratio	31.75***	13.73***
N	653	196

[a] The sample includes male youth 14 to 24 years of age in 1966 who were not enrolled in scho who were employed as wage and salary workers, and who stated a specific occupational goal at both the 1966 and 1969 survey dates.

$^*p < .10$; $^{**}p < .05$; $^{***}p < .01$ (two-tailed tests).

no evidence, however, that years of schooling, occupational training, seniority, marital status, residence in the South or in a central city, commitment to work, or preferences for economic rewards in 1966 had any influence on revisions of career objectives between 1966 and 1969 among male youth.

Other insights into the effects of work experience on work attitudes may be gained from published data from the NLS. Parnes et al. (1970a, pp. 178-185) have shown, for instance, that family background, ethnic origin, schooling, and the extent of a youth's labor market information have a considerable impact on occupational aspirations while youth are still in school. Taken together with the present findings it appears that while work experience shapes work attitudes, numerous other forces have a considerable impact as well. Similarly, Parnes et al. (1975b, pp. 13-15) report that among the older women there was a perceptible change in attitude toward market work, particularly among the whites, during the 1967 to 1972 period. However, it appears likely that the trend among these women reflects a continuation of longer-run trends in women's attitudes toward market work more than the influence of their own work experience during the period. Furthermore, despite their five years of work experience during the period, these women perceived little change in their husbands' attitudes toward their working.

V. SUMMARY AND CONCLUSIONS

The data presented in this chapter provide little evidence of a changing work ethic. Although younger workers may be more dissatisfied with their jobs than their older counterparts, they appear no less committed to the value system of the mainstream of the American work force. For example, while 73-78 percent of white and black middle-aged men reported they would continue to work if they received enough money to live comfortably without working, even more of their younger counterparts responded similarly. Likewise, there appears to be little difference between the younger and older women in response to the same questions. These findings thus are consistent with those in chapter four, where there were no differences between the younger and older cohorts in commitment to the Protestant work ethic that hard work leads to success.

With respect to other work attitudes, it seems clear that workers are interested in noneconomic as well as economic, intrinsic as well as extrinsic work rewards, regardless of age, sex, or race. This too is consistent with findings in previous chapters. Furthermore, young men and young women of both races aspired to considerably greater occupational heights than either they or their older counterparts had attained. Thirty to forty percent of the young men, however, believed their chances of attaining their career goals were only "fair" at best, and black youth both aspired to less prestigious occupations than whites and reported less confidence in their ability to attain their goals.

The data in this chapter, taken as a whole, also suggest that both cohorts of women were less committed to work in the market than their male counterparts. Black women, however, appeared more committed to work than white women and more liberal in their attitudes toward working mothers. In 1968, for example, 64 percent of the white and 35 percent of the black young women planned to be married, keeping a house, and raising a family at age 35 rather than working. Among both cohorts of women, roughly 30-40 percent responded that they would retire if they were to receive enough money to live comfortably without working. Of the older white women, more than one-fourth said they would stay home if they lost their current job, rather than find another job, and nearly one-third planned to stay home rather than work five years later.

Moreover, at the first survey date about three-fourths of the black women and about 85 percent of the white women in both cohorts were unfavorably disposed toward mothers with young children working if they chose to do so but their husbands disagreed. Furthermore, among both cohorts of women, about 20 percent of those who were married and working viewed their husbands as negatively disposed toward their working. Over the next five years, working women became no more likely to perceive their husbands as favorably disposed toward their working.

Similar to the findings of other studies on the subject,[14] the longitudinal data show clearly that work attitudes are systematically related to subsequent labor market experience, even when controlling for a wide range of individual differences in skills, abilities, and demographic characteristics, including occupational differences. White middle-aged men who were highly committed to work in 1966, for example, advanced more in hourly earnings, were less likely to encounter a spell of unemployment or to spend time out of the labor force, and were more likely to make a voluntary change of employer and to receive formal occupational training over the next five years than comparable workers less highly committed to work. Among white and black young men, those who aspired to more prestigious occupational heights, and those who were confident in their ability to attain their goals, encountered considerably greater success during the early stages of their work careers than comparable youth with less ambition and self-confidence.

Among the older white women, those who perceived their husbands to be highly opposed to their working were less likely to advance occupationally or in earnings over the next 4 years, encountered considerably more unemployment, and were less likely to receive occupational training than comparable women who perceived their husbands as very favorably disposed toward their working. Other work-related attitudes strongly and consistently associated with subsequent labor market experience among the older women include attitude toward work in the home, work commitment, attachment to employer, and preferences for noneconomic rewards. Making the findings all the more impressive is the fact that only women who worked throughout the period were considered in the analyses. The observed effects of work attitudes on the subsequent labor market experience of working women thus ignores the effects of these attitudes on the decision to work at all.

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[14] See: Parnes et al. (1975a, pp. 237-243; 1975b, pp. 183-187); Kerckhoff (1974); Gasson et al. (1972); and Duncan and Hill (1975).

Finally, there is evidence that the labor market experience of workers has a considerable impact on their work attitudes, suggesting a feedback relationship between the formation of work attitudes and labor market experience. Occupational attainment, occupational advancement, hourly earnings, and advancement in earnings have all been shown to be systematically related to changes in occupational aspirations among male youth. Nonetheless, it is unlikely that current work experience or work experience during the recent past, is the principal factor affecting one's work attitudes. Among the young men and women, both white and black, occupational aspirations changed little on the average between 1966 and 1969, for example, despite the fact that many of them had crossed the critical threshold from school to work in the interim. Even among those young men who were working throughout the entire period, there was little change in aspirations on the average. Furthermore, despite the vast disparities in pay and occupations between young men and women, male and female youth differed little in occupational aspirations.

CHAPTER VI

THE IMPACT OF WORK ATTITUDES FORMED PRIOR TO LABOR MARKET ENTRY ON THE PROCESS OF EARLY LABOR MARKET ATTAINMENT

Eileen Appelbaum and Ross Koppel

I. INTRODUCTION

This chapter is an examination of the role of work-related attitudes in the process of early labor market attainment. The sample design ensures that the measures of work-related attitudes are ascertained while respondents were enrolled full-time in school, so that these attitudes should not have been formed by the labor market experience. This analysis provides a stringent test of the power of these attitudes to affect subsequent work experience. In addition, the effects of these attitudes are measured "net" of the influence of variables traditionally examined by economists: education, family background, household responsibilities, experience, and local labor market characteristics. Possibly, these attitudes influence labor market success indirectly, via their effects on the other explanatory variables. Since such influences are purposely excluded from this analysis, the effects of these attitudes are examined at the very margin of their predictive power.

The objective factors influencing labor market success have been widely studied, most recently by Blau and Duncan (1967) and by Sewell and Hauser (1975). Race, sex, socioeconomic class, and education are known to exert a powerful effect on occupational and economic attainments, yet the impact of work-related attitudes on labor market position has received less attention. A significant reason for the lack of such research is that data for such studies must necessarily be longitudinal because the possibility of a reciprocal relationship between attitudes and labor market experiences confounds the interpretation of results in cross-sectional analysis.

Attitudes such as occupational aspirations, expectations, type of work motivation, commitment to the labor force, and sex role definition may affect labor market outcomes in several ways:

(1) Attitudes may reflect the objective factors of race, sex, socioeconomic class, and education. The possibility that work-related attitudes are intervening variables, "carrying" the effect of background factors is implicit.

(2) Attitudes may lead to investments in human capital and in this way exert an indirect influence on labor market position.

(3) Attitudes may reflect omitted productivity variables, for example, quality of schooling or training, and may then appear to have an independent effect.

(4) Attitudes may be an independent force affecting labor market attainment directly.

(5) Some combination of the above may exist.

By using attitudes measured while the young men and women in the sample were still students, and by including these measures in a model of the determinants of subsequent labor market position, this chapter examines the extent to which these attitudes make an independent contribution to labor market experiences. These experiences include wages, annual earnings, occupational prestige, unemployment, and labor supply over the first two years after leaving school.

II. WORK-RELATED ATTITUDES AND THE LABOR MARKET EXPERIENCES OF YOUNG WOMEN

Although no measures of attitudes are included, a recent study of women's earnings by Mincer and Polachek (1974) has conjectured that differences in expected attachment to the labor force may affect earnings through their influence on skills acquired during the initial post-school period of employment. Similarly, Gurin (1974) has suggested that sex differences in work commitment and occupational aspirations may result in sex differences in earnings. While other researchers also have indicated that women's orientation toward work may have a major impact on labor force participation and labor market rewards, few, if any, have empirically examined these relationships.

The NLS data from the 1968, 1969, and 1970 interviews of young women are used to ascertain the effect of several work-related attitudes that are suggested, but not examined, in the literature on women's labor market activity. The effect of three attitudes measured in 1968 for full-time students--commitment to work (WKCOM68), attitude toward the propriety of work outside the home for mothers of young children (MOMSWK68), and preferences for nonmonetary vs. monetary rewards (WKMOT68)--on the hourly wages, annual earnings, occupational status, unemployment experience, and labor supply of young women over the first two years after completing school are considered here.[1]

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[1] Occupational aspirations and expectations are also available in the NLS data, but neither proved to be significant in predicting young women's early labor market experiences. Their failure to be significant may be due to difficulties in measuring them consistently for the young women. Occupational aspirations and expectations, for example, cannot be ascertained for young women who intend to be housewives and have no current plans to work in the future.

The principal hypotheses concerning the relationship between women's attitudes and initial labor market experiences are derived from Mincer's study (1962a) of the costs and implications of on-the-job training. Similar arguments have been advanced by Becker (1967), Doeringer and Piore (1971), Oi (1962), and Parsons (1972). Mincer essentially argued that firms incur sizable costs for on-the-job training of their workers, at least some of which are charged to the trainee. The worker who takes a job that pays lower wages initially than otherwise could be earned anticipates a future return from the experience gained in the job. If the earnings of workers receiving on-the-job training are compared with those of nontrainees who are similar to them in terms of schooling and other characteristics, Mincer (1962a, S53) states that

> . . . the trainees would initially receive lower earnings than those not training, the difference representing costs of training. At a later age, earnings of trainees would rise above earnings of the untrained, the difference constituting a return on the investment.

Mincer estimated that per capita on-the-job training costs for female college graduates in 1949 varied from $830 to $2,160, depending on the assumptions made. The comparable figure for males was $15,700. The magnitude of the female figures, Mincer (1962a, S67) argued,

> . . . is quite reasonable, in the light of investment theory: the average female expects to spend less than half her working life in the labor force. In particular, she has a high probability of dropping out of the work force for prolonged periods of child-rearing soon after, and possibly during, the training period. It is clear that returns on prolonged on-the-job training would be small. Hence pecuniary incentives to invest in on-the-job training leading to higher levels of skill are weak. And even when a girl plans on a career, that is, expects to be permanently attached to the labor force, the opportunity for investing in on-the-job training is likely to be limited. So long as there are some elements of specificity in any training programs or promotional schemes of the firm, the employer will prefer men to women trainees, even if the latter profess occupational ambitions. This also implies that to the extent that women do obtain specific training they bear a larger fraction of the total costs of such training than men.

We hypothesize, therefore, that women who are committed to work can be expected to seek jobs with larger skill development and learning components. Thus, they should earn less during the early years of their careers than women of comparable education and background who do not plan to work when they are older and who, ceteris paribus, are less likely to receive such training. Similarly, it is expected that women who do not plan to interrupt their careers for long periods, and who plan to work while their children are young, will also seek jobs that offer training and advancement opportunities. Unfortunately, the variable measuring attitude toward mothers working reflects the respondent's attitude toward the role of women generally, and not towards her own role. The effect of this attitude on earnings is likely, therefore, to be weaker than the effect of work commitment.

A preference for nonmonetary vs. monetary rewards may also be expected to influence the extent of career involvement and to lead to the choice of a job that offers on-the-job training and consumption of amenities. This preference may have a negative impact on wages, but its effect on annual earnings may be somewhat less clear, since women who like their work may work more hours, or alternatively, the more interesting jobs may have shorter hours. Since jobs with career ladders for advancement and opportunities for learning and growth of skills usually offer higher nonmonetary rewards than dead-end jobs, it is hypothesized that each of these attitudes may exert a positive influence on occupational prestige.

Our measures of work-related attitudes also allow a more direct examination of the effects of tastes and preferences for market work on labor supply. The hypotheses are (1) that work commitment measures a preference for market work over home work and therefore should have a positive impact on labor supply; (2) that a positive attitude toward the appropriateness of market work for mothers of young children should affect labor supply positively; and (3) that no a priori statement can be made about the effect of work motivation, since women who like their work may want to work more hours, or the "better" jobs may normally entail a shorter work week, or those who are motivated to work by a desire for good wages may also choose to work more hours in order to earn more.

Cross-sectional evidence from the first NLS survey of young women (Shea et al., 1971) indicates that those married women with children whose attitude toward mothers working can be characterized as permissive, have higher labor force participation rates and tend to work more hours per week than those who oppose the idea of mothers working. A later study (Parnes, 1975), utilizing data from several surveys, suggests that the association results from the effect of attitudes on labor supply. If women with permissive attitudes toward working mothers are more likely to work after their own children are born, their attitudes toward work may affect human capital investments and labor market rewards as well as labor supply in the initial post-school period.

Data pertaining to each of these attitudes were obtained from the 1968 interviews with young women. Commitment to work (WKCOM68) was ascertained from responses to the question concerning plans for labor force participation vs. home production activities at age 35. It is a variable equal to 1 if the respondent plans to be working, and 0 otherwise. Preference for nonmonetary vs. monetary rewards (WKMOT68) was ascertained from the question that asked whether liking the work or good wages was more important in a job. It too is represented by a dummy variable, with "liking the work" = 1 and "good wages" = 0. Finally, the attitude toward the employment of mothers(MOMSWK68) is based on responses to a series of three questions postulating the employment of a married woman with preschool-age children under specified conditions. The composite score on these three questions has a possible value between 3 and 15, ranging from most opposed through ambivalent to most permissive.

Methodology: Variables and Hypotheses

The principal method of analysis used in this chapter is multiple regression analysis. Functions are specified as additive equations with a dummy variable for race and with control variables for family background, domestic responsibilities, human capital, and job and labor market characteristics. Although estimating separate regression equations for blacks and whites is desirable, the small number of black women would not provide results in which we could have sufficient confidence. For the analysis of wages, annual earnings, and occupational status, separate regressions for white women without children, who constitute the largest subgroup of women in our sample, are also presented for comparison with the results for the total sample. This permits us to examine whether race and the presence of young children interact with the attitudinal variables and affect our findings. Also, the analysis of labor supply is restricted further to the most relevant subset of our particular sample of young women, those who were married in 1970.

(1) Dependent variables. The primary measures of labor market attainment are wages and annual earnings. Wages (WAGE70) are measured by hourly rates of pay on current job in 1970 for wage and salary workers. Hourly wage rates, rather than annual earnings, are the preferred measure of earned income because the latter is the product of wages and hours worked, and thus is complicated by the incidence of unemployment and by individual choices between work in the market, work at home, and leisure. The results for annual earnings (EARN69-70), measured in dollars for the 1969-1970 period, are also reported since this measure of income is widely used as an indication of labor market success.

The nonpecuniary rewards derived from a job are related to the prestige or social status of the job, which is measured by the Duncan Index (Duncan, 1961) score of the woman's 1970 job (STATUS70). This index is widely used in sociological models of status attainment for young men (Blau and Duncan, 1967; Duncan et al., 1972; Sewell and Hauser, 1975). It has recently been used in a study of occupational status of women (McClendon, 1975), but its use in research on females does present some difficulties. The index was constructed using the "percent of male workers [in the occupation] with four years of high school or a higher level of educational attainment, and percent with incomes of $3,500 or more in 1949" (Blau and Duncan, 1967). It appears likely that clerical and sales occupations have been assigned a higher rank than would ordinarily be expected.

The unemployment experience of a young woman constitutes a further dimension of labor market success or failure. Three measures of unemployment during the 1968-1970 period are utilized in this analysis: total weeks unemployed, susceptibility to unemployment; and duration of unemployment among those with some unemployment. Susceptibility to unemployment is measured by a variable that takes on the value 100 if the respondent suffered any unemployment during the period, and 0 otherwise. Coefficients for this regression thus are given in percentage terms. Duration of unemployment is measured by weeks unemployed for those who have had some unemployment.

Two measures of labor supply were selected. The first is annual hours in the labor force from 1969 to 1970, measured by weeks in the labor force multiplied by usual hours worked per week during the period. This measure captures both the willingness of the woman to participate in the labor force and the extent of her participation. The second measure is weeks employed during the same year, which is less satisfactory since it reflects not only the woman's intention to supply labor, but also the incidence of unemployment. Either of these measures doubtless is a better proxy for amount of labor supplied than is labor force status (in or out of the labor force at the survey date). Furthermore, for these particular regressions the sample is restricted to married women.

(2) Control variables. Family background variables are measured by race and by an index of the socioeconomic level of the parental family. Numerous studies (cf. Kohen, 1973; Thurow, 1969) have found that race affects the labor market success of young men indirectly through its impact on the quantity and quality of schooling, and directly as current labor market discrimination results in lower entry-level wages for blacks and entry barriers to certain occupations.

In the case of women, however, there have been some recent suggestions that black women have begun to attain income parity with white women (Wallace. 1973; Gurin, 1974). This is attributed to the fact that the position of white women in the wage and occupational structure has shown little change since the mid-1960s and has improved more slowly than that of other workers since the early 1950s, while at the same time black women have been able to move into the clerical jobs from which they had previously been excluded. Being black may, therefore, have a negative effect on measures of labor market success in this study, but the effect may not be as large as observed for black men.

The socioeconomic level of the parental family proxies for both social class and human capital investment by the respondent's parental family. The major impact of socioeconomic status on both labor market success and labor supply after marriage is thought to be felt indirectly via its effect on years of schooling completed. Nevertheless, high socioeconomic status may have some positive direct effect on early labor market success, since families in this category may be better able to provide a network of "contacts" for finding a good first job. Furthermore, if employers discriminate on the basis of social class, low socioeconomic status may have a negative effect on wages, earnings, occupational attainment, and labor supply, and a positive effect on unemployment.

In each case, race (BLACK) is represented by a dummy variable with black = 1 and white = 0. Socioeconomic level of the parental family (SESINDX) is measured by an index based on father's education, mother's education, education of the oldest older sibling, father's occupation and the availability of reading matter in the home. In the labor supply equation, an additional family background variable measuring the husband's annual earnings (HUSBEARN) is included.

The quantity of labor supplied by a married woman is expected to be negatively related to the level of her husband's earnings.

Since employers prefer, where possible, to hire young, single women without children (Oppenheimer, 1970), and since family responsibilities absorb a relatively greater part of the time and energy of women with young children, measures of domestic responsibilities are also included in the regressions. It is expected that they will have a negative effect on the wages, annual earnings, and occupational status of young women.

Moreover, the presence of young children increases a woman's productivity in the home. Carrying out her increased home production activities while engaging in market work may impose both economic and psychic costs on the woman, thereby reducing her market wage. Home productivity, as measured by the presence of young children, may therefore have a negative effect on time spent in the labor market (Bowen and Finegan, 1969; Cain, 1966; Mincer, 1962b).

Three dummy variables are used to characterize household responsibilities: married without children (MSNOKID); married with children (MSKID); and not married, but with children (NOMSKID). The reference category is not married and without children. In the labor supply equation run exclusively for married women, the presence of children is measured by YNGCHILD, a dummy variable equal to 1 if the woman has children, and 0 otherwise.

Previous research into the effects of ability on labor market success has resulted in support for almost every possible outcome. Hunt (1963) and Ashenfelter and Mooney (1968) have found that ability does not affect earnings, while Gintis (1971) argued that ability affects earnings only indirectly through its effect on schooling. Furthermore, Taubman and Wales (1974) found that mental ability has no effect on initial wages, but that over time the effect grows so that after a few years ability is an important determinant of earnings. Kohen (1973), using NLS data from the cohort of young men, arrived at the somewhat different conclusion that mental ability had a significant effect on wages for both blacks and whites, but that its effect on occupational status was significant for whites only. For women, the important consideration is apparently the sex-typing of jobs which limits occupational opportunities and results in little attention being paid to ability differences in making occupational assignments. It is expected, then, that neither occupational status nor wages in the initial post-school period will be affected by IQ scores.

Ability is measured by the standardized score obtained by the respondent on one of several tests of mental ability taken during the early part of her secondary schooling. There is no presumption that this score measures only innate intelligence. IQ scores are simply interpreted as one summary measure of the individual's stock of human capital acquired prior to the age of testing, incorporating home investments in human capital along with years and quality of schooling and inherent ability. Average through high IQ (AV-HIIQ) is a dummy variable that equals 1 for those with an IQ of 100 or better and 0 otherwise. Since approximately 12 percent of the women in the sample did not take these tests or would not allow the release of their scores, cases have been preserved by the use of a dummy variable for IQ not available (NOIQ). Low IQ is the reference group.

The positive effects of education and experience on the wages and earnings of women, as well as of men, are well established in the human capital literature. Since the quantity of labor supplied varies directly with wages, this positive relationship between wages and education implies that education will also have a positive impact on labor supply.

Except for the labor supply equation, education is measured by dummy variables for high school graduation (HSGRAD), some college (SOMECOL), and college graduation (COLGRAD). The reference category includes those with fewer years of schooling. For the labor supply equation, SOMECOL and COLGRAD have been collapsed into the single variable COLLEGE. This was necessitated by the fact that the additional restrictions in this part of the analysis reduced the sample size.

The maximum length of post-school experience in the labor market for the women in the analysis was two years. This occurs because all women in our sample were in school in 1968 and because the NLS data for young women were available only for the 1968-1970 survey. Those women who were out of school and had one year or more in the labor market (EXPER1) were distinguished from those who had one year or more in the labor market but continued in school on a part-time basis (EXPER2). The reference group is those women with less than one year of labor market experience.

The effects of the education and experience variables on the occupational status of women are not clear. If women, like black men, are crowded into a limited number of occupations, the effects of education and experience on occupational status are likely to be weak. Women, unlike black men, however, often have the option of withdrawing from the labor force if they cannot find jobs whose status is commensurate with their education. If they exercise this option, the result will be a strong relationship between education and status. In a study of sex and occupational status McClendon (1975) found that the determinants of occupational status for women were virtually the same as those for men, with the direct effect of education functioning as the major determinant of occupational achievement. The same result is expected in this study.

A variable measuring whether the respondent worked while enrolled full-time in school has also been included in the young women's regression equations as a measure of labor market experience, and is expected to be positively associated with labor market success. Since children from poorer families may be more likely to seek employment while in school, it is also possible that this variable will proxy for low family income. If this is the case, employment while in school is likely to exert a negative effect on early labor market success since low family income, like low socioeconomic status, may result in unequal access to the better entry-level jobs. Part-time employment in the labor market while still enrolled full-time in school is measured by the variable EXPER3, which equals 1 if the respondent has such experience, and 0 otherwise.

Since labor market earnings are supposedly sensitive to the unemployment rate and to the demand for female labor in local labor markets, occupational status of entry-level jobs is also expected to be inversely related to these factors. Presumably, employers find they can fill jobs with better qualified workers in periods of high unemployment, but must relax hiring standards when demand for labor is high.

Differences in region are expected to capture wide variations in industrial composition and, perhaps, in the composition of unemployment. In addition, they proxy for broad variations in prices between South and non-South. Residence in a central city or urban area proxies for both the higher cost of living in larger metropolitan areas and for the greater range of employment opportunities such locales often provide. The unemployment rate and the index of demand for female labor in the local labor market, as well as whether the local labor market is in a large metropolitan area and whether it is located in or out of the South, are expected to capture some of the effects of employment opportunities on female labor supply.

The job characteristics which are controlled are (1) whether the job is part-time (less than 30 hours a week) or full-time and (2) whether it is covered by a union contract. The first characteristic is expected to have a negative effect on wages and occupational status; the second is expected to have a positive effect on wages, while its effect on occupational status is indeterminate since both the very low status jobs and those with high prestige tend to be nonunionized.

The local unemployment rate (UNRATE), given in tenths of a percent, measures the level of aggregate demand in local labor markets in the year in which the woman entered the labor force. The index of demand (DEMAND) for female labor is based upon the presence or absence in the area of industries that normally provide above average employment opportunities for women. Region of current residence in the United States (SOUTH) is represented by a variable equal to 1 if the respondent lives in one of the 16 southern states or Washington, D.C., and 0 otherwise. Except in the labor supply equation, two dummy variables are used to represent residence in a central city (CENTCIT) or in an urban area other than a central city (URBAN). Residence in a rural region is the reference category. In the labor supply equation, CENTCIT and URBAN have been collapsed into METROP because of the reduced sample size.

Finally, full-time employment (FULLTIME) is represented by a variable equal to 1 if the respondent works 30 or more hours a week, and 0 otherwise. UNION is a variable equal to 1 if the respondent is employed in a job covered by a union contract, and 0 otherwise.

Results

The results of estimating the additive form of the model of wages, annual earnings and occupational status are presented in Table 6.1. Means for these and subsequent regressions may be found in the Appendix to this chapter. The results indicate that the hypothesized relationship between work commitment and labor market earnings has been confirmed: Women who plan to spend more of their adult lives in the labor market earn 17 cents an hour less than women of comparable education and background who do not have such plans. This

TABLE 6.1

LABOR MARKET EXPERIENCE OF WOMEN 16 TO 26 YEARS OF AGE IN 1970[a]

Explanatory Variables	WAGE 70	t-ratio	EARN69-70	t-ratio	STATUS70	t-ratio	JOBSAT70(%)	t-ratio
WKCOM68	-.17	1.98**	-384	2.54***	-2.73	1.55*	10.3	1.01
WKMOT68	-.35	2.65***	-321	1.40*	-.34	.12	-3.1	.19
MOMSWK68	.00	.30	9	.31	-.23	.73	-1.3	.77
BLACK	.01	.61	144	.53	-1.53	.48	-35.4	2.10**
SESINDX	-.00	.32	0	.60	.09	1.96**	-.8	3.05***
MSNOKID	.20	2.17**	80	.48	-2.77	1.45*	7.1	.76
MSKID	.05	.31	-677	2.22**	-1.61	.47	40.2	2.27**
NOMSKID	-.16	.68	-954	2.44***	-1.17	.25	60.8	1.88*
AV-HIIQ	.01	.08	336	2.08**	1.36	.72	13.3	1.37*
NOIQ	-.09	.68	57	.24	3.05	1.15	36.3	2.04**
HSGRAD	.28	2.10**	405	1.73**	12.67	4.70***	12.0	.45
SOMECOL	.98	6.25***	1425	5.25***	18.67	5.95***	36.1	1.26
COLGRAD	1.38	8.36***	2071	7.22***	37.16	11.19***	5.0	.16
EXPER1	.10	1.21	2018	13.74***	.52	.30	b	
EXPER2	-.09	.37	806	2.11**	8.89	1.98**	b	
EXPER3	-.25	2.82***	-15	.96	-.15	.08	6.4	.55
UNRATE	-.01	2.80***	-2	.43	-.10	2.10**	-0.0	.13
DEMAND	-.01	1.07	0	.01	.13	.93	-0.4	.49
SOUTH	-.18	1.94**	-218	1.35*	2.01	1.08	3.4	.33
CENTCIT	.48	4.69***	365	2.03**	5.08	2.43***	38.6	3.16***
URBAN	.45	4.76***	452	2.53***	2.32	1.12	51.4	4.26***
FULLTIME	-.15	1.15	1164	5.59***	8.15	3.33***	14.7	.94
UNION	.18	1.89**	147	.90	-.57	.30	2.0	.20
STATUS69	b		b		b		0.8	2.19**
DSTATUS	b		b		b		1.3	3.63***
WAGE69	b		b		b		-0.1	1.61*
DWAGE	b		b		b		-0.2	2.60
FIRMMOB	b		b		b		0.1	1.21
CONSTANT	2.49		-63		13.02		73.9	
R^2	.41		.60		.44		.36	
F	10.74		23.87		13.19		2.41	
N	380		395		407		138	

[a] Sample includes respondents who were enrolled in school full-time in 1968 but not enrolled full-time in 1970.

[b] Variable not in regression.

$***p \leq .01$; $**.01 < p \leq .05$; $*.05 < p \leq .10$ (one-tailed tests).

loss of income can be interpreted as costs of on-the-job training being borne by women who plan to spend the major part of their adult lives in the labor market.

The effect of commitment to work on wages and annual earnings for white women without children is presented in Table 6.2. The results are similar to those observed for the entire sample: Wages are reduced by 15 cents an hour and annual earnings by $323 for women who plan to work. The loss of wages and earnings, then, cannot be attributed to race or to the presence of young children. This supports the argument that women who plan to work purchase on-the-job training by accepting lower initial wages.

One further test was performed to substantiate this argument. If it is true that the negative effect on wages represented initial training costs incurred by women who planned to work, then, after a period of several years in the labor market, work commitment should pay off in higher wages for the more committed women. To test this hypothesis, cross-sectional wage, annual earnings, and occupational status regressions for young women who were employed in 1968 were estimated, allowing the observation of the effects of work commitment on the income and status of women with more work experience. Such women may have begun to capitalize on their early on-the-job training. These women were out of school an average of 3.7 years by 1968 and had worked in the past year an average of 40 weeks. Also, 89 percent of the women had worked 30 hours or more a week during that year.

The outcome of these regressions is presented in Table 6.3, where the explanatory variables are defined in the same manner as in Table 6.1. Additional control variables in this analysis, necessitated by the longer post-school period for women in these regressions, are TRAINING, a variable equal to 1 if the respondent has received training prior to 1968, and 0 if otherwise; JOBTENUR, which equals length of time in current job in months; and GENEXPER, which measures length of time since leaving school and equals age in 1968 minus years of schooling minus 5. The results show that commitment to work has a positive impact of 10 cents an hour in 1968, significant at the .05 level, as compared with the negative 17 cents an hour that high work commitment costs women in earlier stages of their careers.

The evidence thus tends to support the hypothesis that after a few years in the labor market commitment to work yields a positive return. When later years of the NLS data become available, it will be possible to reexamine this question longitudinally, measuring work commitment prior to entrance into the labor market and earnings at a point in time beyond one to two years after leaving school.

Although women who are planning to spend the greater part of their adult lives in the work force appear to be able to "purchase" on-the-job training, the expectation that such jobs would be more prestigious is not supported by the evidence. A tradeoff was anticipated in which women who accepted lower wages but received on-the-job training would find themselves in jobs with a

TABLE 6.2

LABOR MARKET EXPERIENCE OF CHILDLESS WHITE WOMEN 16 TO 26 YEARS OF AGE IN 1970[a]

Explanatory Variables	WAGE70	t-ratio	EARN69-70	t-ratio	STATUS70	t-ratio
WKCOM68	-.15	1.43*	-323	1.76**	-1.67	.77
WKMOT68	-.48	3.01***	-316	1.15	-1.35	.41
MOMSWK68	.00	.01	-4	.15	-0.96	1.01
SESINDX	.00	.07	2	.51	0.11	1.97**
MARRIED	.23	2.22**	68	.37	-3.04	1.42*
AV-HIIQ	-.05	.49	273	1.42	0.64	.28
NDIQ	-.14	.86	-47	.16	2.40	.72
HSGRAD	.38	2.29**	429	1.46*	16.40	4.83***
SOMECOL	1.10	5.83***	1445	4.34***	21.97	5.68***
COLGRAD	1.49	7.51***	1992	5.68***	41.07	10.08***
EXPER1	.05	.52	2100	11.95***	.82	.40
EXPER2	-.20	.66	998	1.93**	4.31	.70
EXPER3	-.28	2.70***	-2	.01	-.95	.44
UNRATE	-.01	2.95***	-3	.57	-.10	1.65**
DEMAND	-.01	1.32*	-3	.24	.07	.44
SOUTH	-.16	1.43*	-120	.61	3.00	1.31*
CENTCIT	.55	4.61***	389	1.83**	5.64	2.27**
URBAN	.55	4.75***	490	2.34***	2.68	1.10
FULLTIME	-.17	1.14	1140	4.48***	7.08	2.35***
UNION	.15	1.38*	229	1.18	-1.26	.55
CONSTANT	2.66		-66		13.48	
R^2	.44		.61		.45	
F	10.08		20.29		11.08	
N	273		281		290	

[a] Sample includes respondents enrolled in school full-time in 1968 but were not enrolled full-time in 1970.

***$p \leq .01$; **$.01 < p \leq .05$; *$.05 < p \leq .10$ (one-tailed tests).

TABLE 6.3

CROSS-SECTIONAL DETERMINANTS OF 1968 WAGES, EARNINGS AND OCCUPATIONAL STATUS OF WOMEN[a]

Explanatory Variables	WAGE68	t-ratio	EARN67-68	t-ratio	STATUS68	t-ratio
WKCOM68	0.10	2.07**	45	.42	-0.40	.33
WKMOT68	-0.18	3.18***	-296	2.29**	-2.00	1.33*
MOMSWK68	0.00	.32	-19	1.11	-0.22	1.14
BLACK	-.10	1.41*	-310	1.97**	-5.22	2.83***
SESINDX	0.002	1.63*	10	3.58***	0.14	4.75**
MSNOKID	0.02	.39	205	1.65**	-0.28	.19
MSKID	-0.04	.71	-265	2.16**	-0.67	0.47
NOMSKID	-0.05	.72	-37	.24	-1.51	.82
AV-HIIQ	0.04	.96	21	.20	3.80	3.11***
NOIQ	-0.01	.19	-90	.63	0.75	.46
HSGRAD	0.36	5.20***	1001	6.33***	11.95	6.44***
SOMECOL	0.56	6.29***	1197	5.81***	15.40	6.48***
COLGRAD	1.18	11.60***	2424	10.53**	34.06	12.57***
TRAINING	0.04	.90	226	2.32	1.70	1.51*
JOBTENUR	0.48	3.14***	384	11.73***	1.08	2.76***
LABEXPER	0.05	4.61***	195	7.54***	-0.49	1.60*
UNRATE	0.002	1.65**	3	1.04	.03	.73
DEMAND	0.01	1.76**	33	2.31**	0.23	1.40*
SOUTH	-0.23	5.15***	-301	2.93***	1.32	1.11
CENTCIT	0.10	2.03**	259	2.30**	4.89	3.75***
URBAN	0.09	1.97**	167	1.55*	2.39	1.91**
FULLTIME	0.20	2.90***	1474	9.79***	8.46	4.93**
CONSTANT	0.59		-2575		-1.91	
R^2	.28		.43		.40	
F	16.34		32.29		29.45	
N	925		951		984	

[a] Sample includes respondents who were 14 to 24 years of age and not enrolled in school full-time.

***p ≤ .01; **.01 < p ≤ .05; *.05 < p ≤ .10 (one-tailed tests).

future, and that such jobs would be higher in status. The effect of WKCOM68 on job status, however, is negative (Table 6.1). Since the Duncan Index of occupational status, as mentioned earlier, ranks occupations according to the status of men employed in them, its questionable validity for women may have produced this result.

Preferences for nonmonetary vs. monetary work rewards had a strong negative impact on subsequent hourly wage rates. For the total sample, those who were more concerned with liking the work than with good wages in 1968, earned 35 cents an hour less in 1970 than those for whom good wages were more important (Table 6.1). For white women without children the effect of this attitude was even stronger, with those preferring nonmonetary rewards in 1968 earning 48 cents an hour less 2 years later (Table 6.2). Women who were motivated to choose jobs in which liking the work was more important, apparently worked more hours or experienced less unemployment, since the negative effect on annual earnings was much weaker than would be expected on the basis of hourly wages. For white women without children, the effect of this attitude on annual earnings was not significant, while for the total sample it was only significant at the .10 level. The negative impact on wages and earnings also can be observed in the cross-sectional regressions for all employed women in the cohort in 1968 (Table 6.3), where preferences for nonmonetary rewards apparently reduce hourly wages by 18 cents an hour and annual earnings by $296 a year.

Surprisingly, this attitude has no significant effect on occupational status. The hypothesis was that women who felt that job content was most important would accept lower wages than they could earn otherwise in exchange for greater nonpecuniary rewards; yet these women are not employed in higher status occupations. Here again, however, it may be that the Duncan Index is an inappropriate measure of occupational status for women.

No systematic relationship between a woman's attitude toward mothers of young children working and any of our measures of labor market success (Tables 6.1 and 6.2) was found.[2] This result was not unexpected because (1) this variable measures a woman's attitude toward the role of women in general, and need not imply anything about her own intentions; and (2) only 10 percent of the women in our sample had young children in 1970, so this attitude may be largely irrelevant to their decisions and to their labor market success in 1970. Since the proportion of women with young children will go up as the women mature, this result may change when data from the later surveys are used. However, the evidence from the cross-sectional regressions (Table 6.3), in which 33 percent of the women had children and in which this attitude remained insignificant, does not indicate that this is likely.

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[2] MOMSWK68 was also run using dummy variables to characterize the respondent's attitude as "opposed," "ambivalent," or "permissive." This specification also yielded no significant relationship with market success.

The regression results pertaining to unemployment experience in the first two years after leaving school are presented in Table 6.4. The results show little systematic relationship between any of the three work attitudes held in 1968 and the incidence of unemployment among young women during the 1968-1970 period. WKMOT68, the only attitude to manifest a relationship with unemployment, is inversely related to weeks of unemployment. This negative coefficient suggests that those women who value "good wages" more highly than "liking the work" experienced one and a third more weeks of unemployment during the 1968-1970 period. Thus, for our sample, work-related attitudes apparently affect wages, annual earnings, and occupational status, but have little influence on unemployment.

Table 6.5 indicates the relationship between work-related attitudes and the labor supply decision of married women. The results suggest that attitudes held prior to entry into the labor force do not have the expected influence on either the annual hours in the labor force or weeks employed of married women. Neither commitment to work nor a positive attitude toward the employment of mothers of young children has a direct influence on the amount of labor supplied by young married women in the early period after leaving school. Preferences for economic rewards, however, relative to nonmonetary rewards, are associated with considerably greater hours supplied by young married women. Apparently, the effects of differences in tastes or attitudes toward work are dominated by the effects of educational attainment and the presence of young children. With respect to weeks employed, these were the only variables to have an observable effect.

III. WORK-RELATED ATTITUDES AND LABOR MARKET EXPERIENCES OF YOUNG MEN

A similar analysis of attitudes and young men's labor market behavior was undertaken. Three particularly appropriate attitudes available from the National Longitudinal Surveys cohort of male youth are: occupational aspirations for age 30, expectations of achieving those aspirations, and preference for nonmonetary vs. monetary rewards.[3] The purpose, as in the previous section, is to ascertain the effects of attitudes formed while in school on initial labor market success, "net" of the effects of education, experience, socioeconomic background and local labor market characteristics.

The data from the sample of the young men offer several advantages over those of the young women. Information from four surveys (1966 through 1969) is available for the young men, compared to three for the young women. Thus, a larger sample is available, since by the fourth survey date more youth have left school, permitting separate analyses for whites and blacks. By the same token, labor market experiences over a longer period of time since leaving school may be examined for the men, 1966-1969 vs. 1968-1970. Also, as noted earlier, the problems pertaining to the women's occupational aspiration

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[3] The attitudinal questions probing work commitment and attitude toward mothers working were not ascertained in the first survey for this cohort and therefore have not been utilized in the analysis for young men.

TABLE 6.4

1968-1970 UNEMPLOYMENT EXPERIENCE OF WOMEN 16 TO 26 YEARS OF AGE IN 1970[a]

Explanatory Variables	Weeks Unemployed	t-ratio	Susceptibility	t-ratio	Duration	t-ratio
WKCOM68	0.52	0.76	-4.89	1.03	1.55	1.19
WKMOT68	-1.33	1.34*	-6.49	0.94	-1.96	1.19
MOMSWK68	0.02	0.16	-0.14	0.17	0.06	0.27
BLACK	2.25	1.98**	14.07	1.79	1.47	0.78
SESINDX	0.01	0.56	0.17	1.43	-0.01	0.44
MSNOKID	0.84	1.17	9.50	1.91**	0.96	0.72
MSKID	-1.70	1.67**	-4.40	0.62	-2.98	1.56*
NOMSKID	-2.80	1.58*	-7.28	0.59	-4.29	1.38*
AV-HIIQ	-0.78	1.06	-6.46	1.27	-0.85	0.65
NOIQ	0.50	0.52	-8.42	1.25	2.77	1.56*
HSGRAD	0.27	0.31	0.07	0.01	0.85	0.56
SOMECOL	-0.69	0.61	-20.67	2.64***	1.81	0.82
COLGRAD	-2.27	1.96**	-20.15	2.50***	-2.52	1.15
EXPER1	0.91	1.40*	-0.11	0.02	1.73	1.37
EXPER2	2.68	1.54*	25.30	2.10**	1.79	0.68
EXPER3	-0.90	1.18	-6.84	1.28*	-0.69	0.50
UNRATE	0.02	1.31*	0.06	0.54	0.05	1.55**
DEMAND	-0.00	0.06	0.39	0.90	-0.10	0.82
SOUTH	0.28	0.39	1.14	0.23	0.60	0.46
CENTCIT	1.04	1.31*	4.94	0.89	1.74	1.22
URBAN	-0.56	0.72	-8.84	1.63*	0.38	0.26
CONSTANT	2.89		33.11		9.04	
R^2	0.08		0.09		0.10	
F	2.25		2.55		1.39	
N	567		567		276	

[a] Sample includes respondents who were enrolled in school full-time in 1968 but were not enrolled full-time in 1970.

***$p < .01$; **$.01 < p < .05$; *$.05 < p < .10$ (one-tailed tests).

TABLE 6.5

LABOR SUPPLY OF MARRIED WOMEN 16 TO 26 YEARS OF AGE IN 1970[a]

	Married[a] Women			
	Hours in labor force 1969-70	t-ratio	Weeks employed 1969-70	t-ratio
WKCOM68	-49	0.32	2.2	0.62
WKMOT68	-456	1.62*	6.0	1.19
MOMSWK68	3	0.13	0.5	0.87
BLACK	259	0.88	0.2	0.03
SESINDX	-5	1.30*	0.1	0.71
YNG CHILD	-387	2.17**	-15.6	4.23***
HUSBEARN	-0	0.45	-0.0	0.21
HSGRAD	965	3.60***	15.8	3.68***
COLLEGE	1275	4.26***	20.7	4.09***
EXPER3	110	0.63	0.4	0.10
UNRATE	-1	0.17	0.3	0.28
DEMAND	-23	1.35*	-0.3	0.92
SOUTH	-15	0.10	1.2	0.34
METROP	339	2.03**	3.0	0.89
CONSTANT	2158		13	
R^2	.45		.49	
F	3.47		8.01	
N	74		133	

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[a] Sample includes respondents who were enrolled in school full-time in 1968, but out of school and married by 1970.

***$p \leq .01$; **$.01 < p \leq .05$; *$.05 < p \leq .10$ (one-tailed tests).

questions are not found in the survey of the young men. In contrast to the young women's interview schedules, all young men were asked to report their occupational aspirations. Similarly, the questions concerning the expectations of achieving the aspirations may also be utilized for the young men's sample. Finally, the sample was restricted in all cases to respondents who were students at the initial survey date, but who entered the labor force during the succeeding three years. As before, this is an attempt to ensure that the attitudes did not reflect previous labor market experience.

Dependent Variables

The indicators of labor market experience which are examined in the regression analyses are by now familiar to the reader and only the dates at which they were measured need be noted here.[4] Wages (WAGES69) and the Duncan Index of occupational prestige (DUNCAN69) are taken directly from the 1969 surveys. Earnings (EARN68) were ascertained in 1969 but, logically, must reflect the annual income from the previous year.

The three measures of unemployment are aggregates of data collected throughout the period of possible labor force participation. WEEKSUNEMP is the total number of weeks unemployed from 1967 to 1969. Duration of unemployment (DURATION UNEMP) indicates the actual number of weeks of unemployment among those who have had some unemployment. Susceptibility to unemployment (SUSCEP UNEMP) is a variable assigned the value of 100 if the respondent has had any unemployment, and 0 if otherwise. The results for this particular regression thus are expressed in percentage terms.

Attitudinal Variables

The theoretical basis for the models employed in this section is similar to that presented in the discussion of the young women's regression equations. The expectations concerning the role of these attitudes, however, require elaboration. A positive relationship should be found between the measure of occupational aspirations and the status rank of the jobs that these young men have acquired. These aspirations, however, may not be positively associated with earnings or wages. As suggested by Blau and Duncan (1967), young men desiring high status jobs may be willing to trade initial income for the promise of greater, but later, rewards.

In the relationship between occupational aspirations and unemployment, it is expected that those aspiring to higher status jobs should desire stable work patterns, yet, at the early stages of their careers, young men who wish more prestigious occupations may be willing to spend a longer time searching for appropriate employment than those with lesser ambitions. The young men's occupational aspirations were measured by assigning a Duncan occupational prestige score to the job desired at age 30. For this analysis the measure was reconstructed into categorical variables: high aspirations (HI ASPIR) equals 1 if the occupation desired was 70 or more Duncan points, and 0 if otherwise; medium aspirations (MD ASPIR) equals 1 if the desired occupation was between 40 and 69 Duncan points, and 0 if otherwise. Also, those who did not know what occupations they wanted were included in a separate variable, DK ASPIR, which equals 1 if they met this criterion, and 0 if otherwise. The last variable in this set, NA ASPIR, was included to preserve cases: it equals 1 if a respondent's occupational aspiration could not be ascertained, and 0 if otherwise.[5] The reference category for this set was comprised of those with occupational aspirations below 40 Duncan points.

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[4] Since labor force participation among male youth who are out of school is nearly universal and considerably less discretionary than among married women, the relationship between work attitudes and labor supply is not examined for the young men.

It is difficult to predict any systematic relations between expectations of achieving aspirations and any of the measures of labor market experience. "Excellent" chances of achieving a low status occupation may be expected, just as "excellent" chances of achieving a high status occupation may be expected, so the meaning of the expectation must be considered in relation to the goal. While those with high occupational aspirations and with an excellent expectation of achieving their aspiration may be reflecting realistic views of themselves, the expectations, as well as the aspirations, may indicate a poor knowledge of the world of work and of the required qualifications for employment.

An additional alternative might be termed "the self-fulfilling prophecy." Those who really expect to reach their goals might orient their education, part-time jobs, and/or hobbies to better their chances of success. To this extent, those with "excellent" expectations, other things being equal, should have more favorable labor market experiences.

Expectations of achieving occupational aspirations are captured by a variable (EXPECT) which is equal to 1 if the respondent reported "excellent" expectations, and 0 if otherwise. In addition, to preserve cases, another variable was constructed to determine the effect of not knowing or not reporting occupational expectations.[6] This variable (NA CHANCE) equalled 1 if the responses to the expectations question were not substantively usable, and 0 if otherwise. The reference category for these binary variables was comprised of those individuals who reported less than "excellent" chances of achieving their occupational goals.

Operationalization of the variable WKMOT66, capturing preferences for nonmonetary rewards, is identical to the WKMOT68 measure used in the analysis of the young women. This variable is expected to perform substantially the same within the two cohorts.

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[5] The NA variables have no substantive interpretation and therefore are not reported in the tables.

[6] The vast majority of those without usable data comprised those who reported "don't know" to the question.

Control Variables

To ensure that the attitudes included in the model are not solely reflecting the influence of some other factor or factors, the variables that are usually examined in relation to the determinants of labor market success (Becker, 1964; Bowen and Finegan, 1969; Sewell and Hauser, 1975) have been statistically controlled. In addition to the attitudinal measures, the following independent variables are included in the regression equations: socioeconomic status, mental ability, educational attainment, full vs. part-time employment, years in the labor force, region, marital status, local unemployment rate, and size of local labor market. While most of these control variables were used in the analysis of the young women, some have had to be operationalized differently to be appropriate for the sample of young men. The index of socioeconomic status (SESINDX), full vs. part-time employment (FULLTIME), region (SOUTH), educational attainment (HSGRAD, SOMECOL, COLGRAD), and the local unemployment rate (UNRATE) are measured in the same manner as in the regressions for the young women.

Mental ability, as measured by standard psychometric tests of IQ (see Kohen and Herriott, in Kohen, 1973), is included as a variable (HI IQ) which equals 1 if the respondent is one or more standard deviations above the mean, and 0 if otherwise. For this metric, the mean is 100 and the standard deviation is 16, the conventional IQ distribution. As in the analysis of the young women, a variable (NOIQ) has been constructed to preserve cases when an IQ score was unavailable. The reference category for the mental ability variables is comprised of respondents with IQ scores below 115.

Years in the labor force, represented by a variable (LFEXPER), reflects the number of years between leaving school and the last survey date (1969) and thus varies from 0 through two years. The size of the local labor market is indicated by a variable (SIZE) which is equal to 1 if the labor force has 300,000 or more people, and 0 if smaller.

Marital status is represented by a single variable (MARSTA), which equals 1 if the respondent is married with his wife present, and 0 if otherwise. In the young women's regressions, interaction terms for marital status and presence of children were included. Because the burden of child care responsibilities does not usually affect married men to the same degree as married women, such elaborate controls were deemed unnecessary in the men's regressions.

Results

Table 6.6 presents the results of the regression equations. The first five rows contain the attitudinal variables. The next eleven rows comprise the control variables. As with all multiple regression analyses, the coefficients indicate relationships "net" of the effect of all other independent variables.

The first dependent variable examined, Duncan score of job held in 1969 (DUNCAN69), is positively affected by 1966 occupational aspirations. Whites with high occupational aspirations (HI ASPIR) subsequently acquire jobs that

TABLE 6.6

REGRESSION RESULTS--NET RELATIONSHIPS BETWEEN YOUNG MEN'S WORK-RELATED ATTITUDES, 1966, CONTROL VARIABLES AND SELECTED ASPECTS OF SUBSEQUENT LABOR MARKET EXPERIENCE, BY RACE[a]

(t-ratios)

	DUNCAN69		WAGES69		EARN68		WEEKS UNEMP		SUSCEPT UNEMP[b]		DURATION UNEMP	
	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
HI ASPIR	5.9	10.8	.07	.39	-151	933	-0.3	-2.3	-7.2	-12.6	1.6	.6
	(2.37)***	(2.82)***	(.43)	(1.53)*	(.48)	(1.80)**	(.18)	(.85)	(.99)	(1.08)	(.48)	(.11)
MD ASPIR	4.3	-1.6	.19	.45	350	620	1.6	3.2	4.2	12.9	2.7	2.7
	(1.96)**	(.49)	(1.24)	(2.09)**	(1.26)	(1.38)*	(1.24)	(1.37)*	(.66)	(1.28)*	(1.0)	(.76)
DK ASPIR	-6.2	-21.1	.09	.28	601	710	3.2	-21.4	18.9	-6.5	-15.8	-20.4
	(.49)	(1.01)	(.10)	(.21)	(.39)	(.25)	(.45)	(1.44)*	(.53)	(.10)	(.59)	(1.07)
EXPECT	3.7	1.80	-.02	-.05	580	500	-1.0	4.7	-11.0	15.1	-0.1	7.7
	(1.74)**	(.45)	(.11)	(.18)	(2.12)**	(.91)	(.78)	(1.66)**	(1.74)**	(1.25)	(.02)	(1.76)**
WKMOT66	1.1	1.0	.09	-.08	269	-487	-0.4	-4.1	4.1	-14.7	-3.1	-4.7
	(.52)	(.41)	(.61)	(.47)	(.97)	(1.40)*	(.33)	(2.24)**	(.63)	(1.87)**	(3.69)***	(1.65)**
SESINDX	0.1	0.2	0.00	.01	-2	9	-0.0	0.0	-0.0	0.3	-0.1	0.0
	(2.25)***	(2.47)***	(.00)	(2.22)**	(.31)	(.85)	(.54)	(.15)	(.15)	(1.14)	(1.30)*	(.17)
HI IQ	-0.0	-6.4	-.11	-1.03	-471	-1548	3.0	-0.2	8.6	-44.4	7.0	c
	(.02)	(.60)	(.66)	(1.50)*	(1.62)*	(1.08)	(2.21)***	(.02)	(1.25)	(1.36)*	(2.18)**	
COLGRAD	39.2	47.4	.91	1.54	2771	2924	-8.3	-6.7	-33.5	-18.6	-12.4	-18.5
	(10.21)***	(6.87)***	(3.52)***	(3.43)***	(5.81)***	(3.10)***	(3.79)***	(1.37)*	(2.99)***	(.88)	(2.02)**	(1.94)**
SOMECOL	13.6	13.1	.48	1.39	1972	1501	-7.6	-4.2	-22.8	11.3	-12.4	-5.8
	(3.96)***	(2.46)***	(2.05)**	(3.83)***	(4.58)***	(2.04)**	(3.82)***	(1.12)	(2.24)**	(.70)	(2.80)***	(.99)
H S GRAD	4.8	5.8	.01	.26	761	550	-6.2	-3.0	-12.3	-7.2	-10.8	-3.5
	(1.85)**	(1.83)**	(.05)	(1.27)	(2.33)***	(1.27)	(4.15)***	(1.30)*	(1.59)*	(.74)	(3.60)***	(1.04)
FULLTIME	4.5	0.8	-.04	-.92	1515	-117	-1.7	5.9	10.7	15.2	-7.5	6.7
	(2.03)**	(.18)	(.28)	(3.00)***	(5.33)***	(.18)	(1.31)*	(1.76)**	(1.62)*	(1.06)	(2.63)***	(1.23)
LF EXPER	4.2	1.8	.13	.09	1102	642	-0.0	-2.9	-6.9	-10.7	1.9	-3.5
	(3.86)***	(1.16)	(1.73)**	(.82)	(8.10)***	(2.93)***	(.03)	(2.43)**	(2.14)**	(2.14)**	(1.29)*	(1.80)**
MARSTA	-0.3	1.4	.71	.27	1417	1263	-1.4	-0.7	-3.8	-2.4	-3.1	-1.1
	(.16)	(.43)	(4.94)***	(1.30)*	(5.40)***	(2.90)***	(1.18)	(.29)	(.61)	(.24)	(1.0)	(.27)
SOUTH	1.3	4.5	-.32	-.57	-380	-1160	-3.1	1.2	-10.4	2.5	-6.6	1.2
	(.67)	(1.49)*	(2.41)**	(2.95)***	(1.55)*	(2.86)***	(2.76)***	(.57)	(1.82)**	(.27)	(2.49)***	(.32)
UNRATE	.01	-0.1	-0.4	-.01	-4	-17	0.1	0.0	0.2	0.2	0.1	0.1
	(.13)	(.66)	(.94)	(.91)	(.58)	(1.60)*	(2.94)***	(.80)	(1.41)*	(.84)	(2.09)**	(.93)
SIZE	5.0	10.9	.37	.09	381	-310	0.4	1.2	-1.07	1.7	0.3	0.1
	(2.92)***	(3.61)***	(3.13)***	(.48)	(1.74)**	(.76)	(.37)	(.56)	(.21)	(.19)	(.16)	(.03)
CONSTANT	-0.6	-0.8	222	194	18	2216	0.1	0.3	0.5	0.2	0.3	0.5
	(.98)	(.82)	(4.87)***	(3.12)***	(.02)	(1.70)**	(2.71)***	(.48)	(2.38)**	(.81)	(3.69)***	(.42)
R^2	.53	.57	.28	.43	.50	.38	.12	.22	.09	.20	.26	.22
F-ratio	23.63***	10.99 ***	7.52 ***	5.84 ***	21.02***	4.88***	2.99***	2.31 ***	2.14***	2.06***	2.67***	1.32
N	419	178	391	166	415	171	419	176	420	176	166	115

[a] In all cases the sample was restricted to young men who were enrolled in school the first survey date (1966) and entered the labor force during the subsequent three years.

[b] Since the dependent variable is dichotomous, regression coefficients have been multiplied by 100 to express the results as the percentage differential.

[c] Insufficient number of cases to calculate coefficient.

*p < .10; **p < .05; ***p < .01 (one-tailed tests) are almost six Duncan points higher than those with low aspirations. Blacks with high aspirations attain jobs that are almost eleven points higher than those with low aspirations. Those whites aspiring to even middle status occupations (MD ASPIR) achieve somewhat more prestigious jobs than the whites with lower aspirations.

Only the white sample shows a significant relationship between expectations of achieving occupational aspirations (EXPECT) and subsequent Duncan score. The whites with "excellent" expectations have jobs that are almost four points above those with less optimistic expectations. Two tentative explanations for this racial differential are offered: First, blacks were prevented by discrimination from translating their expectations into occupational reality; second, blacks, compared to whites, lacked sufficient information about the occupational hierarchy to accurately assess their chances of success (Parnes and Kohen, 1975). These explanations are not mutually exclusive and the results can neither confirm nor reject either, but the importance of the finding for whites remains. Expectations of achieving occupational aspirations can influence job status even when controlling for other work-related attitudes, education, labor market experience and characteristics, and socioeconomic background.

Preference for nonmonetary vs. monetary rewards (WKMOT66) does not affect job status level for either race. This is not surprising; both types of motivation are best satisfied with high status occupations. Since the more intrinsically rewarding jobs are disproportionately found in the upper tiers of the occupational hierarchy, it is expected that those oriented toward nonmonetary rewards would desire the high status jobs. Higher status jobs usually pay more, however, also motivating respondents who want more money toward the same jobs desired by those with nonmonetary preferences. This lack of a clear dichotomy may well explain the failure of WKMOT66 to perform significantly in these equations.

No attitudinal variable significantly affects the hourly wages of whites. Among blacks, only the occupational aspirations measures generate any systematic relationships with hourly earnings. The lack of negative coefficients on HI ASPIR and MD ASPIR, and the positive coefficients in the blacks' regressions for wages, indicate that young men are not sacrificing current wages in order to attain higher status jobs as was conjectured by Coleman et al. (1971).

When the results of the annual earnings equations are compared to the results of the hourly wages equations there are some similarities and some seemingly logical differences. As with wages, occupational aspirations are significant in the blacks' regression equation. Those blacks with high aspirations earn $933 per year more on average than those with low aspirations, and those blacks with medium range occupational aspirations earn $620 per year more on average than those with low aspirations. In contrast, EXPECT performs only among the whites. Those young men with excellent expectations of reaching their occupational goals appear to earn $580 more per year than those who are less sure of success.

The work motivation variable produces mixed results, both in regard to direction of effect and to race. Those blacks with a preference for nonmonetary rewards appear to earn less than those blacks who claim "good wages" are most important. Whites, however, show no significant relationship between work motivation and annual earnings. It appears that white young men who seek intrinsically rewarding jobs are not penalized in earnings, but black young men who seek intrinsically rewarding jobs must pay for these desires with lower earnings.

Aspiration to high occupational status (HI ASPIR) does not significantly affect unemployment for either race, but those blacks aspiring to middle status occupations experience 3.2 weeks more unemployment (WEEKS UNEMP), and are almost 13 percent more likely to experience any unemployment (SUSCEPT UNEMP), than those with low status occupational aspirations. Expectations of reaching an occupational goal also appear to affect whites and blacks differently. Blacks with excellent occupational expectations experience more unemployment (DURATION UNEMP) than those without such optimistic expectations. In the only instance in which EXPECT is significantly related to unemployment for the white sample (Table 6.6), it manifests the opposite influence. Whites with excellent occupational expectations are 11 percent less likely to experience any unemployment than those with lower expectations.

While work motivation among blacks is a significant influence in all three of the unemployment equations, it is significant in only one out of the three among whites. In all cases, however, those with preferences for nonmonetary rewards experienced less unemployment than those primarily seeking good wages.

IV. THE IMPACT OF LABOR MARKET SEX DISCRIMINATION ON THE WAGES OF YOUNG WOMEN

There now exists a body of empirical research which shows that even after controlling for male-female differences in education, years of labor market experience, and other relevant productivity proxies, wage differentials between men and women persist.[7] Most researchers have attributed this residual wage gap to sex discrimination in the labor market. Recently, however, it has been suggested that differences in work commitment may explain much of this remaining wage gap (Mincer and Polachek, 1974). The hypothesis is that women have a lesser commitment to the labor force than men and thus do not seek more demanding jobs offering training and opportunities for advancement and leading ultimately to higher wages.

The question of whether work commitment is, in fact, the elusive cause of the residual wage gap between men and women can be addressed through a comparison of the wages of women who are committed to work with those of men of comparable skills, education and labor market exposure.

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[7] See, for example: Kohen and Roderick (1975); and Oaxaca (1973).

In the earlier analysis of the role of work-related attitudes, it was found that women who plan to spend more of their adult lives in the labor market initially earn 15 to 17 cents an hour less than women who do not have such plans (Tables 6.1 and 6.2). This loss of income apparently represents costs of on-the-job training being borne by young women. After a period of several years in the labor market, however, work commitment has a positive impact on earnings. The "committed" women, because they are now reaping the returns to earlier on-the-job training experiences, earn 10 cents an hour more than the "uncommitted" women (Table 6.3). It appears that commitment to work eventually pays off in the form of increased economic rewards. It seems appropriate, therefore, to compare the earnings functions of "committed" women with those of men in a cross-sectional analysis which captures some of the effects of a longer period in the labor market.

In measuring the extent of labor market discrimination on the basis of sex, it is necessary to control for the effects of productivity factors that result in differences in wage rates. Such controls have been implemented through a combination of regression and standardization techniques used by Blinder (1973) and Oaxaca (1973). Separate wage regressions were calculated for young men and "committed" young women who were 16 to 24 years of age in 1968 and who were not enrolled in school full time but were employed as wage or salary workers. The resulting coefficients were then used as weights in computing the adjusted mean wages that would prevail if (1) women had the same skills, experience, education, and other characteristics as the men, or (2) if women were remunerated at the same rate as men for equal qualifications. The attributes statistically controlled in this manner were race, socioeconomic status, respondent's education, labor market experience, full-time vs. part-time work, local labor market size, region of residence, and marital status.

Conceptually, the first method, which gives the women the men's labor market attributes, may be thought of as removing the influences of discrimination experienced by the young women before they began working. Adjusted in this manner, the remaining difference between the wages of men and of women should not be due to differences in productivity and may be interpreted as a measure of sex discrimination in the labor market.

Using the second method, which eliminates the effects of differences in the earnings structure, allows the determination of what the women would have earned if the labor market rewarded their skills and experience as it does those of comparable men. In this case the difference between the adjusted and the observed mean wages of women may be interpreted as a measure of sex discrimination in the labor market. For this sample it will be seen that both procedures yield results that are substantively the same.

Wages are estimated as a function of BLACK, SESINDX, HSGRAD, SOMECOL, COLGRAD, TRAINING, LABEXPER, WEEKS, FULLTIME, SIZE and SOUTH.[8] WEEKS is the number of weeks worked in the preceding year, and all other variables were defined earlier. In addition, the men's equation includes the variable MARSTA, while the women's equations include MSNOKID, MSKID and NOMSKID which were also described earlier.

Marriage and children can be expected to have different effects upon the wages of young men and women (Polachek, 1975). Men allocate a smaller proportion of their time to household and child care responsibilities than do women. On the supply side, this suggests that at least some of the women who are married and/or mothers will resolve the conflicting claims on their time and energy by seeking less demanding jobs and foregoing opportunities for on-the-job training and advancement. On the demand side, employers may discriminate against female employees by limiting the opportunities of all women to enter occupations that have a high training component and lead to positions of greater responsibility because some women will leave the labor force to rear children. Young married men, in contrast, are expected to begin earning enough to support a wife and family. They tend, therefore, to devote more time and energy to getting ahead on the job. Employers, then, view young married men as more stable and responsible workers than young single men and are more willing to hire, train and promote them. Marriage, therefore, has a very favorable impact on the wages of young men.

This difference in the way in which the labor market "rewards" the marital status of men and women poses a problem for the analysis. Even if there were no sex discrimination in the labor market, the unequal responsibility for household tasks and child rearing that exists among men and women in this society would result in wage differentials between men and women. In the first procedure that was described for adjusting women's wages, the men's means are substituted into the women's equation. The women's marital status variables (MSNOKID, MSKID, NOMSKID) were retained and the women's means and coefficients for these variables were used. Implicitly, this assumes that, even if the women have the opportunity to obtain the productivity and other characteristics of the men, their decisions regarding marriage and children will not be affected.

In the second procedure, the women's means are substituted into the men's equation. This procedure examines what would happen if the labor market rewarded the women exactly as if they were men. If the men's marital status coefficient (MARSTA) is used in computing the predicted mean wages of women, the implicit assumption is that all differences in earnings between men and women due to marital status are the result of employer discrimination against married women and/or mothers. If, on the other hand, the women's marital status coefficients are used in computing the predicted mean wages of women, this implies that all differences in earnings between men and women due to marital status are the result of married women and/or mothers freely choosing less rewarding jobs. Since the truth probably lies somewhere in between, the second procedure is carried out both ways. This provides an upper and lower bound for the predicted mean wages of women in the absence of sex discrimination in the labor market.

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[8] The rationale for the selection of the wage equation variables was previously discussed. It should be noted that these variables have become standard in models of the determination of earnings. See, for example, Sewell and Hauser (1975); Kohen and Roderick (1975); Haller and Portes (1973); Blinder (1973); and Duncan et al. (1972).

The means and regression results for the "committed" women and the men are reported in Table 6.7, and the results of the standardization procedures are reported in Table 6.8. A comparison of the "committed" women with the men using the first procedure outlined above indicates that nearly all of the initial wage gap remains.

As can be seen in Table 6.8 the observed mean wage of the men is $2.72; that of the women is $2.01. Using the first standardization procedure results in a predicted mean wage for the women that is higher than that observed by just 3 cents (Table 6.8, line 4). The wage gap, thus, decreases by only 4.2 percent when differences in productivity and other relevant characteristics are controlled. Almost 96 percent of the difference in wages cannot be attributed either to the inferior productivity attributes of the women or to differences in personal characteristics between the men and women.

The second standardization procedure predicted the women's wages as if they were rewarded for their productivity and other characteristics at the same rates as the men. This procedure also demonstrates substantial discrimination, although the choice of marital status coefficients has a large impact on the size of the residual wage gap. The predicted mean wage of women, using the men's marital status coefficient, is $.95 higher than the observed (Table 6.8, line 8). In other words, equal rates of return to productivity and other characteristics for both men and women would result in a 47.3 percent increase for these women.

Using the women's marital status coefficients in the standardization technique results in a predicted mean wage for the women of $2.75 (Table 6.8, line 10). While not as high as in the previous case, the differential between the predicted and observed mean wage for the women is $.74, and the women would have received 31.8 percent more had they been rewarded as men (Table 6.8, lines 11 and 12).

These results appear to offer strong support to those who argue that male/female wage differences are due largely to sex discrimination in the labor market.

V. SUMMARY AND CONCLUSIONS

The central question addressed in this chapter is whether work-related attitudes formed prior to entry into the labor market exert any significant influence on the early labor market experiences of young men and women. The research design employed here provides a stringent test of the power of these

TABLE 6.7

DETERMINANTS OF WAGES OF COMMITTED YOUNG WOMEN AND YOUNG MEN: CROSS-SECTIONAL DATA[a]

Explanatory Variables	Committed Young Women b (t)	Committed Young Women Mean	Young Men b (t)	Young Men Mean
BLACK	-5 (0.42)	.20	-25 (3.25)	.13
SESINDX	0.0 (0.09)	99.80	1 (5.61)	99.56
HSGRAD	40 (3.04)	.55	35 (5.36)	.45
SOMECOL	58 (3.24)	.13	41 (4.71)	.15
COLGRAD	120 (6.18)	.15	110 (10.33)	.10
TRAINING	10 (1.26)	.46	7 (1.27)	.31
LABEXPER	1 (0.65)	3.78	7 (6.76)	3.98
WEEKS	1 (2.85)	39.18	1 (3.48)	45.14
FULLTIME	-5 (0.47)	.81	17 (2.10)	.90
SIZE	22 (2.31)	.29	44 (8.40)	.34
SOUTH	-21 (2.35)	.43	-30 (5.45)	.33
MSNOKID	2 (0.15)	.18	--	--
MSKID	-6 (0.57)	.32	--	--
NOMSKID	-6 (0.45)	.12	--	--
MARSTA	--	--	42 (7.95)	.48
Constant	119.78		57.57	
R^2	.30		.31	
N	272		1465	
Mean Wage		$2.01		$2.72

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[a] The men and women in this analysis are 16 to 24 years of age in 1968. They are not enrolled in school full time and are employed as wage or salary workers. Data for the women are from February 1968, and for the men from October 1968.

TABLE 6.8

CROSS-SECTIONAL ANALYSIS OF THE IMPACT OF SEX DISCRIMINATION ON THE 1968 WAGES OF YOUNG WOMEN WHO ARE MORE COMMITTED TO WORK[a]

(1)	Observed mean wages of men	$ 2.72
(2)	Observed mean wages of women	$ 2.01
(3)	Observed wage gap (line 1 - line 2)	$ .71
(4)	Predicted mean wages of women, procedure 1[b]	$ 2.04
(5)	Residual wage gap, procedure 1 (line 1 - line 4)	$ .68
(6)	Precent change in wage gap after productivity and other differences between men and women are controlled $\frac{(\text{line 5 - line 3})}{(\text{line 3})} \times 100$	-4.2%
(7)	Predicted mean wages of women, procedure 2[c]	$ 2.96
(8)	Differential in women's wages (line 7 - line 2)	$ .95
(9)	Predicted wages of women as a percent of actual wages (line 7/line 2) x 100	147.3%
(10)	Predicted mean wages of women, procedure 3[d]	$ 2.75
(11)	Differential in women's wages (line 10-line 2)	$ .74
(12)	Predicted wages of women as a percent of actual wages (line 10/line 2) x 100	131.8%

[a] The men and women in this analysis are 16 to 24 years of age in 1968. They are not enrolled in school full time and are employed as wage or salary workers. Data for the men are for October 1968, and for the women are for February 1968. The effects of inflation during the 7-month period between survey dates exaggerates the effects of sex discrimination somewhat.

[b] Substituting the means for the young men into the young women's equation.

[c] Substituting the means for the young women into the young men's equation, retaining the variable MARSTA and using the mean and coefficient for the young men for that variable.

[d] Substituting the means for the young women into the young men's equation, using the women's marital status variables (MSNOKID, MSKID, NOMSKID) and the women's means and coefficients for these variables.

attitudes as predictors of subsequent labor market experience. Attitudes have been included in the regression equations along with the demographic, labor market, and educational variables most likely to carry the indirect effects of these attitudes; therefore, only the net effects of these attitudes on labor market attainment are captured in the analysis.

The attitudinal variables were measured while the respondents were in school--often as many as three years before labor market experiences were observed. While this was necessary to gain a clearer insight into the direction of causality, it undoubtedly reduced the predictive power of the attitudes. Finally, the attitudinal variables were generally ascertained by a single question, which rendered the measures of the attitudes somewhat arbitrary. It is possible that an attitude might be an important influence on some aspect of work experience, but that the metric of the attitude failed to reflect its importance.

Despite all of these difficulties, most of the attitudes indicated direct net effects on at least several aspects of subsequent labor market experience. While no attitude was significant in every equation, and while there were several equations in which no attitude was a significant factor, the results indicate that attitudes formed prior to labor force participation often continue to affect the experiences of young men and women during their early years at work. Among the women, the findings indicate that those who express a greater commitment to market work have lower hourly wages and lower annual earnings in the initial post-school period. The interpretation of this result is that these women are accepting jobs in which entry-level wages are lower, but in which opportunities for training and advancement are greater.

Women who are more concerned with liking their work than with good wages have significantly lower hourly and annual earnings. This is consistent with the explanation that, controlling for other variables, young women who value intrinsic rewards will tend to trade financial remuneration for a more enjoyable job. A woman's attitude, however, towards the propriety of mothers of young children working, apparently has no effect on the wages or earnings of young women. Also this attitude does not affect the amount of labor supplied by young married women, a result at variance with Parnes' (1975) observations for women with young children.

While work-related attitudes have some effect on the pecuniary rewards from work, they have virtually no effect on occupational status as measured by the Duncan Index for the young women in this study.[9] Similarly, these work-related attitudes had almost no direct effect on the decision of young married women to supply labor or on the incidence of unemployment in the initial post-school period.

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[9] As noted earlier the Duncan occupational score may not be a relevant measure of occupational status for women. See Bose, (1973).

Considering the extensive controls, the short time these respondents have been in the labor market, and the simplicity of the attitudinal measures, it is remarkable that the influence of these attitudes over this diversity of labor market experiences can be observed. It is important to note that, even under these stringent conditions, the findings indicate that, where young women face a choice between present and future rewards from work, or between monetary and nonmonetary rewards, these attitudes exert a significant influence.

Among the young men, occupational aspirations affect the job status and the amount of unemployment of both races. Among blacks they also influence income. Expectations of achieving one's occupational aspirations affect the job status and earnings of whites, and the unemployment of whites and blacks. Finally, the type of work motivation is important to the amount of unemployment, and to some degree, to blacks' earnings.

Work motivation was the only attitudinal variable available in a format appropriate for inclusion in the analyses of the experiences of both the young men and young women. This variable (WKMOT66 for the young men, WKMOT68 for the young women) had somewhat different effects for each sample. Among the women, a preference for monetary rather than nonmonetary rewards resulted in significantly higher wages and earnings; however, this attitude had little predictive power for the men's wages and earnings. Work motivation was not significant for either sample in regard to the Duncan Index. Preference for nonmonetary rewards was generally associated with reduced weeks of unemployment among the young women and the young black men; while, for the white men, it was associated with fewer weeks of unemployment among those experiencing some unemployment during the period.

A subsidiary question considered in this chapter is whether the wage differential that persists even after controlling for male-female differences in education, years of labor market experience, and other relevant productivity proxies can be attributed to differences in commitment to the labor force between men and women. This issue was investigated, using the measure of work commitment defined in the earlier sections. Recognizing the somewhat arbitrary and simplistic nature of any measure of work commitment, including the one employed here, that is derived from a single question, the results nevertheless suggest that it is unlikely that the very sizable wage gap between young men and women results from differences in commitment to work.

Of course, in the initial period the committed women are still absorbing some part of their early training costs. To overcome this complication, a cross-sectional analysis of the committed women was employed, thus utilizing a sample of women who had spent a longer average time in the labor market and had begun to reap a positive return to work commitment.

Using regression and standardization techniques to adjust the mean wages of women it was found that (1) "giving" the committed women the men's productivity characteristics reduced the male-female wage gap by just 4 percent, and (2) remunerating the committed women for their own productivity characteristics at the same rate as the men increased their mean wages between 32 and 47 percent, depending on the effects of marital status.

More sophisticated measures of work commitment may modify these findings. If our measure of this attitude toward participation in the work force bears any relationship to reality, however, it is unlikely that this attitude toward work will prove to be a major cause of the male/female wage gap.

TABLE 6A.1

MEAN VALUES FOR WOMEN 16 TO 26 YEARS OF AGE IN 1970[a]

Variables	Black and white women	Childless white women
Independent		
WKCOM68	.271	.241
WKMOT68	.913	.916
MOMSWK68	9.515	9.368
BLACK	.094	--
SESINDX	108.938	111.067
MSNOKID	.275	.315
MSKID	.053	--
NOMSKID	.027	--
AV-HIIQ	.589	.634
NOIQ	.122	.110
HSGRAD	.496	.487
SOMECOL	.179	.188
COLGRAD	.207	.222
EXPER1	.418	.409
EXPER2	.032	.024
EXPER3	.723	.721
UNRATE	45.310	45.250
DEMAND	31.157	31.078
SOUTH	.283	.253
CENTCIT	.338	.307
URBAN	.366	.386
FULLTIME	.888	.896
UNION	.194	.192
Dependent		
WAGE70	2.28	2.32
EARN69-70	2766.36	2900.27
STATUS70	46.960	47.967

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[a] Sample includes respondents who were enrolled in school full-time in 1968 but were not enrolled full-time in 1970.

TABLE 6A.2

MEAN VALUES FOR WOMEN 14 TO 24 YEARS OF AGE NOT ENROLLED IN SCHOOL FULL-TIME IN 1968[a]

Variables	Mean
Independent	
WKCOM68	.271
WKMOT68	.845
MOMSWK68	9.431
BLACK	.121
SESINDX	103.842
MSNOKID	.167
MSKID	.249
NOMSKID	.106
AV-HIIQ	.494
NOIQ	.184
HSGRAD	.587
SOMECOL	.153
COLGRAD	.104
TRAINING	.337
JOBTENUR	17.472
LABEXPER	3.667
UNRATE	38.662
DEMAND	32.448
SOUTH	.308
CENTCIT	.321
URBAN	.355
FULLTIME	.885
Dependent	
WAGE68	1.98
EARN67-68	2848.05
STATUS68	42.561

[a] Means may vary slightly in particular regressions.

TABLE 6A.3

MEAN VALUES FOR LABOR SUPPLY REGRESSIONS

	Married women	
Variables	Hours in labor force 1969-70	Weeks employed 1969-70
Independent		
WKCOM68	.27	.22
WKMOT68	.94	.90
MOMSWK68	10.05	9.88
BLACK	.06	.09
SESINDX	110.64	105.89
YNGCHILD	.22	.35
HUSBEARN	5230.90	5199.00
HSGRAD	.46	.43
COLLEGE	.47	.35
EXPER3	.83	.83
UNRATE	41.20	40.89
DEMAND	32.25	31.83
SOUTH	.36	.38
METROP	.71	.69
Dependent		
Hours in labor force 1969-70	1634	
Weeks employed 1969-70		31

TABLE 6A.4

MEAN VALUES FOR YOUNG MEN'S ATTITUDINAL, CONTROL AND LABOR MARKET EXPERIENCE VARIABLES, BY RACE[a]

	Whites	Blacks
HI ASPIR	.23	.22
MD ASPIR	.33	.29
DK ASPIR	.13	.15
EXPECT	.21	.12
WKMOT	.83	.62
SESINDX	107.14	88.42
HI IQ	.18	.02
COLGRAD	.14	.07
SOMECOL	.14	.08
HSGRAD	.56	.54
FULLTIME	.84	.89
LFEXPER	.84	.79
MARSTA	.24	.21
SOUTH	.26	.52
UNRATE	39.19	39.13
SIZE	.43	.45
DUNCAN69	32.02	26.54
WAGES69	271.70	253.04
EARN68	3707.52	3350.97
WEEK UNEMP	3.71	6.98
SUSCEPT UNEMP	38.85	60.06
DURATION UNEMP	9.56	11.61

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[a] Means may vary slightly in particular regressions. In addition, this sample is for young men enrolled in school the first survey date (1966) and who entered the labor force during the subsequent three years.

CHAPTER VII

WORKER PREFERENCES FOR INTRINSIC AND EXTRINSIC WORK REWARDS

Robert C. Miljus and Paul J. Andrisani

I. INTRODUCTION

This chapter empirically examines individual differences in preferences for two different types of work rewards--intrinsic and extrinsic rewards. In doing so, the chapter first examines the actual reasons that workers offer for both their satisfaction and dissatisfaction with work, in an effort to ascertain the sources of satisfaction and dissatisfaction and to understand better what work has come to mean to the nation's work force. In particular, we seek to ascertain what work has come to mean to those who are dissatisfied with their jobs. Is dissatisfaction with pay, hours of work, and working conditions, for example, less apparent than dissatisfaction with the "meaninglessness" of work?

Second, the chapter examines whether there is evidence of changing preferences for intrinsic work rewards which may possibly signal a changing work ethic. Third, the chapter explores the association between a number of personal, demographic, and job-related characteristics and individual differences in preferences for intrinsic versus extrinsic work rewards. Fourth, the association between these personal, demographic, and job-related characteristics and changes in preferences during the 1966-1972 period is also explored. With respect to each of these issues, age, sex, and race differences in findings are examined.

II. THE INTRINSIC-EXTRINSIC PREFERENCE DISTINCTION

Within the diverse literature on the meaning of work, two central and perhaps competing themes are discernible. Workers who maintain an extrinsic value orientation are said to view work principally in terms of its instrumental character. That is, work supposedly possesses very little, if any, value in and of itself, but rather serves as a central means to certain ends which are not work-centered. These ends usually include financial security, a comfortable material standard of living, access to leisure activities, and social status both at the workplace and within the community.[1]

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[1] For a more complete discussion of this viewpoint, see: Kerr et al. (1962); Baldamus (1961); Bell (1961); Bendix (1956); Dubin (1958); Mills (1956), and Friedmann (1961).

In contrast to an extrinsic work orientation, those who invest work primarily with intrinsic meaning do not value it simply for its instrumental character, but regard it as a central integrating factor in their individual and social lives.[2] The job content is viewed as an important source of enrichment in which individuals may encounter challenges, assume responsibilities, make creative decisions, overcome obstacles, enhance competency, and express a wide range of talents and aptitudes. Through this involvement the worker is said to achieve psychological growth and self-fulfillment via the very process of producing, serving, building, and creating tools, objects, and ultimately culture.

The intrinsic orientation derives essentially from the Renaissance and received much impetus from Marx's philosophical writings on alienation. Denied self-fulfillment at the work place, the world of production, the worker is said to look for realization in the sphere of consumption. For some, the aspiration or hope for status, dignity, and fulfillment through consumption may turn out to be an illusion spurred on by always unsatisfied, never-ending pursuit of further consumption.[3]

Variations among individuals in the meaning attributed to work, and hence in worker preferences, may stem from differences in the past and present circumstances of individuals. Differences in socialization during the formative years and thereafter may account for vastly different value systems, ethics, perceptions, and cognitions. Assimilation of individuals through institutions of the larger society presumably operates to reduce these dissimilarities and to instill in individuals the values, work ethic, and preferences of the dominant culture. The educational system is one such institution. By placing emphasis on the ability and willingness to strive for accomplishment, to successfully handle cognitive challenge, to accept and exercise responsibility in the completion of tasks, and to achieve in both cooperative and independent endeavors, schooling may develop preferences for jobs which provide outlets for the expression of these abilities. Where effective, schooling may develop values and preferences of the dominant culture among youth from all social classes.

Another important aspect of an individual's circumstances which may impact upon preferences is one's job. While many employment situations provide both a meaningful job content and a favorable job context, perhaps even more do not. To the extent that there are substantial real or perceived differences in the amounts of intrinsic work rewards which are available to workers because of their skills, or lack thereof, many workers may be without opportunities for intrinsic rewards regardless of their willingness to forego pay or job amenities. Unskilled workers may have no job alternatives that include an appreciable degree of intrinsic reward, and, therefore, may not view their work as important for any reason other than its economic or instrumental utility. Those whose jobs do provide ample opportunity for challenge, achievement, and responsibility, however, may find the intrinsic rewards of work to be a source of immense satisfaction.

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[2] For further development of this orientation, see: Argyris (1957; 1973); Herzberg (1966); Herzberg et al. (1959); Likert (1961; 1967); Maslow (1943 and 1968); McGregor (1960); Morse and Weiss (1955); Whyte (1955), and Vroom (1964).

[3] For further discussion of the alienation of the worker from his "producer" role, see: Berger (1964); Dahrendorf (1959); Rubel and Manale (1975); and Work in America (1972).

Individual differences in preferences for various work rewards play an important role in the economic theory of the labor market, as well as in psychological and sociological theories of worker behavior. In the former, the allocation of workers among firms, industries, occupations, and geographic areas resulting from these preferences, and especially the pursuit of pecuniary gain, is of central interest.[4] In psychology and sociology, worker preferences have been examined from the perspective of their effect upon broad societal outcomes such as social mobility and economic development.[5]

Much attention also has been devoted to the effect of these preferences upon worker motivation and the resultant implications for organizational performance.[6] How organizational rewards influence job satisfaction is but one of many issues. Whether the same rewards which contribute to job satisfaction also lead to dissatisfaction, if they are absent or inadequately provided for, is another. Herzberg's contention that entirely different factors control satisfaction and dissatisfaction lies at the center of this particular debate.[7] Herzberg asserts that mainly intrinsic factors--e.g., the work itself and opportunities for responsibility, achievement, recognition, advancement, and personal growth--lead to job satisfaction and motivated work behavior. Conversely, job dissatisfaction is thought to result from inadequate extrinsic or "hygiene" factors, which stem from the work environment--e.g., earnings and fringe benefits, job security, working conditions, reasonable hours of work, supportive supervisory styles and policies, and satisfying interpersonal relationships. Critics, who have attacked Herzberg's methodology and findings,[8] mainly on the basis that individual differences (age, sex, personality) were not sufficiently considered, maintain that most organizational rewards contribute somewhat to both satisfaction and dissatisfaction.

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[4] The classic statement of the role of individual differences in preferences in the economic theory of the labor market may be found in Rottenberg (1956).

[5] See, for example, Smelser (1963); McClelland and Winter (1969); and Williams (1963).

[6] For an excellent summary of motivational theories and organizational practices, see Chung (1977).

[7] Herzberg et al. (1959), and Herzberg (1966).

III. MEASURING INTRINSIC AND EXTRINSIC PREFERENCES

In order to ascertain worker preferences, the following attitudinal questions were asked in identical form of all employed respondents in the four NLS cohorts: "What are the things you like best about your job?" and "What are the things about your job that you don't like so well?" These questions were asked at the time of the initial interviews with each cohort, and again in identical form in subsequent interviews. Responses reflecting an intrinsic preference were the following: the work itself, capacity to do work, responsibility, or opportunities for advancement. Preferences for any other reward which stemmed from the nature of the work, or job content, were classified as "other intrinsic." Earnings and fringes, job security, hours of work, working conditions, job pressure, supervision, interpersonal relationships, and company or union policies and administration were classified as extrinsic preferences, while preferences for other rewards stemming from the job context were classified as "other extrinsic." It also was possible for workers to respond that there was "nothing" about their jobs that they liked (disliked).

The principal advantage of these NLS questions is that they circumvent problems of faulty recall inherent in such retrospective approaches as the critical incident method.[9] By probing preferences through asking workers to choose among the factors available in their "actual" job situations, such responses may also be a more realistic representation of preference distinctions than those obtained when workers are asked to consider what they would prefer in some "ideal" job.[10] Furthermore, because of the brevity of responses, the data are perhaps less influenced by the subjectivity of either interviewer or coder interpretations than are other, more elaborate techniques. One serious difficulty with this approach, however is that it is extremely difficult to assess the internal consistency of the information offered by respondents, because there is neither certainty that workers offer meaningful responses which will not change after further reflection, nor that all subjectivity exercised on the part of both the interviewer and the coder has been eliminated.[11]

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[8] See, for example: Dunette, Campbell, and Hakel (1967); House and Wigdor (1967).

[9] The critical incident and other retrospective methods require individuals to think back over an important period in their past. See Herzberg et al. (1959).

[10] Kilpatrick et al. (1964), for example, asked workers to indicate "the kinds of things about an occupation" that could make it "absolutely ideal."

IV. ASPECTS OF WORK LIKED BEST

Responses to the NLS question ascertaining what workers liked best about their jobs are presented by cohort in Tables 7.1 through 7.4. Within each cohort, responses are disaggregated further by race and degree of job satisfaction, and presented for both the initial surveys and the last surveys for which data were available. In all cases, only respondents who were employed and not enrolled in school at the particular survey date are considered.[12]

It is evident in Tables 7.1 through 7.4 that among each of the eight demographic groups, worker preferences are complex and that no singular job aspect prevails. Regardless of age, sex, and race, a variety of both intrinsic and extrinsic preferences are shown: the work itself, good interpersonal relationships, favorable earnings and fringes, opportunities for responsibility or advancement, reasonable hours of work, and capacity or ability to do the work. In contrast, other aspects such as unionism, job security, and supportive company policy are not among the more salient preferences. Despite the fact that all of the respondents were employed, the minimal emphasis upon job security is nonetheless unusual, given the significant increases in unemployment in the early 1970s which particularly affected youth, blacks, and women.[13]

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[11] One of the few studies to openly acknowledge this point and attempt to ascertain information concerning reliability was Schwab and Heneman (1970). Their study ignored, however, the question of unreliable responses elicited by the question itself, and focused instead on reliability difficulties introduced by the lack of agreement among coders in categorizing responses. The obvious limitation to such an approach is that perfect agreement among coders is of little value if responses are meaningless. This issue is particularly relevant since the Schwab and Heneman study, as have most others, used a single retrospective question to elicit responses.

[12] In general, there do not appear to be any consistent systematic differences between the data for these respondents (employed at either survey date) and for those who were employed throughout the entire period. The data for the latter group are presented in the chapter appendix, Tables 7A.1 through 7A.4.

[13] Quinn et al. (1974) compared their data with that of Herzberg et al. (1957) and found that "security" was ranked first of twelve facets listed in Herzberg's summary and fourth in their summary, with about 63 percent of their respondents ranking security as "very important." For a presentation of specific unemployment trends and related data see: Employment and Training Report of the President (1976).

TABLE 7.1
ASPECT OF WORK LIKED BEST BY MIDDLE-AGED MEN, 1966 and 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1966			1971			1966			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	3,152	1,821	1,331	2,351	1,104	1,247	1,166	597	569	813	400	413
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	34.9	40.4	27.3	32.2	37.2	26.9	22.8	26.5	19.1	22.2	23.5	21.0
Capacity to do work	3.7	3.3	4.2	4.4	3.4	5.4	9.2	9.5	9.0	9.3	8.9	9.8
Responsibility or advancement	13.7	14.0	13.4	15.0	16.2	13.9	5.9	7.1	4.6	10.7	11.8	9.7
Other intrinsic	2.1	2.2	1.9	6.1	5.7	6.4	2.2	1.1	3.4	4.9	5.6	4.3
Subtotal intrinsic	54.4	59.9	46.8	57.7	62.5	52.6	40.1	44.2	36.1	47.1	49.8	44.8
Extrinsic												
Earnings and fringes	10.9	7.4	15.5	10.2	7.0	13.0	15.7	12.9	18.6	12.0	12.2	11.8
Job security	3.9	2.9	5.4	3.0	1.6	4.2	5.2	4.1	6.2	4.8	4.2	5.3
Hours of work	4.6	3.6	5.5	4.4	3.3	5.4	5.4	4.3	6.6	4.6	5.2	4.0
Working conditions	5.2	5.2	5.2	2.8	3.4	2.2	5.8	5.0	6.5	3.5	3.9	3.1
Limited pressure	1.7	1.4	2.2	1.9	1.4	2.4	3.3	3.5	3.0	2.5	2.5	2.5
Supervision	2.4	2.9	1.9	1.7	1.9	1.4	6.6	7.2	6.0	6.8	4.2	9.3
Interpersonal relationships	11.3	12.5	9.7	11.4	14.3	8.9	8.0	10.5	5.5	10.9	13.1	8.7
Company policy and administration	2.2	2.3	2.0	1.4	1.8	1.1	4.7	6.1	3.2	2.4	2.4	2.4
Union	0.1	0.1	0.2	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
Other extrinsic	1.7	1.3	2.3	2.7	1.6	3.6	1.9	1.6	2.1	2.4	1.9	2.9
Subtotal extrinsic	44.0	39.6	49.9	39.1	36.3	42.1	56.7	55.4	57.7	49.9	48.6	51.0
Unclassifiable	0.2	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.0
Nothing	1.5	0.2	3.3	2.9	0.4	5.1	3.2	0.5	6.0	2.8	0.7	5.0

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[a] Sample includes all respondents employed at the specific survey date.

TABLE 7.2

ASPECT OF WORK LIKED BEST BY YOUNG MEN, 1966 AND 1970, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1966			1970			1966			1970		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,232	634	598	1,865	903	962	489	167	322	661	252	409
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	29.0	33.1	24.6	28.0	31.1	24.8	26.9	29.5	25.6	20.2	28.3	15.0
Capacity to do work	6.9	6.8	7.0	4.6	3.7	5.5	9.8	9.6	10.0	6.2	5.0	6.9
Responsibility or advancement	9.8	11.7	7.7	14.7	16.5	13.2	4.9	9.6	2.5	6.7	5.9	7.2
Other intrinsic	9.4	10.3	8.5	9.3	9.7	8.8	9.5	12.5	8.0	8.3	10.5	7.0
Subtotal intrinsic	55.1	61.9	47.8	56.6	61.0	52.3	51.1	61.2	46.1	41.4	49.7	36.1
Extrinsic												
Earnings and fringes	12.7	8.2	17.6	11.1	7.5	14.4	12.4	4.9	16.4	10.9	7.4	13.1
Job security	0.9	0.8	1.0	1.4	1.0	1.8	1.0	0.4	1.3	3.1	4.4	2.3
Hours of work	6.3	4.7	8.1	5.0	3.2	6.7	5.9	6.4	5.6	8.4	5.8	9.9
Working conditions	3.0	3.0	2.9	4.7	5.4	4.1	2.5	1.7	2.9	2.9	2.7	3.0
Limited pressure	1.7	1.6	1.8	1.9	1.5	2.2	2.7	3.8	2.0	2.6	3.1	2.2
Supervision	3.1	3.6	2.6	2.1	2.3	1.9	4.0	5.0	3.4	3.6	5.2	2.6
Interpersonal relationships	10.8	10.3	11.3	11.4	13.9	9.1	7.8	9.3	7.0	10.9	10.9	11.0
Company policy and administration	2.1	2.9	1.4	1.5	1.9	1.2	3.5	4.3	3.1	2.0	2.8	1.5
Union	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	2.9	2.3	3.5	1.4	1.8	1.0	3.4	1.2	4.5	3.3	6.4	1.6
Subtotal extrinsic	43.6	37.4	50.4	40.6	38.5	42.5	43.2	37.0	45.8	47.7	48.7	47.2
Unclassifiable	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nothing	1.1	0.5	1.8	3.0	0.6	5.2	5.7	1.7	7.7	11.0	1.5	16.7

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[a] Sample includes all respondents employed and not enrolled in school at the specific survey date.

TABLE 7.3
ASPECT OF WORK LIKED BEST BY MATURE WOMEN, 1967 AND 1972, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1967			1972			1967			1972		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,619	1,097	522	1,633	950	683	809	430	379	681	339	342
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	35.7	41.1	24.5	32.7	38.5	24.7	35.5	40.2	29.7	30.0	35.9	24.0
Capacity to do work	2.0	2.0	2.0	2.4	2.1	2.8	5.2	6.3	3.8	5.1	5.7	4.6
Responsibility or advancement	4.8	5.0	4.5	8.5	9.0	8.2	4.0	3.9	3.9	5.0	4.7	5.3
Other intrinsic	4.1	3.6	5.2	5.8	6.7	4.5	4.6	4.8	4.2	5.8	6.8	4.9
Subtotal intrinsic	46.6	51.7	36.2	49.2	56.3	40.2	49.3	55.2	41.6	45.9	53.1	38.8
Extrinsic												
Earnings and fringes	6.6	4.3	11.3	6.1	2.8	10.8	4.9	3.8	6.4	7.7	4.6	10.8
Job security	0.2	0.1	0.4	0.5	0.5	0.3	0.3	0.0	0.6	1.4	1.7	1.1
Hours of work	5.4	3.8	8.7	7.0	5.8	8.7	6.3	3.9	9.2	6.1	3.5	8.7
Working conditions	2.5	2.7	2.1	2.9	3.1	2.5	2.4	2.1	2.7	2.5	1.8	3.2
Limited pressure	0.9	0.5	1.8	1.0	1.2	0.8	1.9	1.6	2.2	1.4	0.7	2.2
Supervision	4.0	4.5	3.2	2.7	2.6	2.8	11.1	13.5	8.1	6.3	5.4	7.1
Interpersonal relationships	24.5	25.3	22.8	22.6	22.4	22.7	11.4	15.0	6.9	16.4	21.0	11.9
Company policy and administration	1.4	1.6	0.9	1.9	2.3	1.3	1.4	0.7	2.4	2.5	3.6	1.3
Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	4.9	4.0	6.9	4.6	3.1	6.5	4.3	2.8	6.1	4.5	4.5	4.6
Subtotal extrinsic	50.4	46.8	57.9	49.3	43.8	56.4	44.0	43.4	44.6	48.8	46.8	50.9
Unclassifiable	1.0	1.2	0.7	0.0	0.0	0.0	0.6	0.2	1.1	0.0	0.0	0.0
Nothing	1.8	0.3	5.0	1.5	0.0	3.5	6.3	1.2	12.7	5.2	0.2	10.2

[a] Sample includes all respondents employed at the specific survey date.

TABLE 7.4

ASPECT OF WORK LIKED BEST BY YOUNG WOMEN, 1968 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1968			1971			1968			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	936	574	362	1,304	697	607	323	157	166	494	234	260
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	33.0	38.9	23.8	32.6	36.2	28.4	33.1	42.2	24.3	35.2	43.2	28.0
Capacity to do work	2.8	1.2	5.3	3.4	2.1	5.0	4.0	2.9	5.1	6.4	2.9	9.6
Responsibility or advancement	5.6	6.6	4.3	7.4	7.5	7.3	2.8	3.5	2.0	2.9	2.8	3.0
Other intrinsic	4.4	4.0	4.9	7.0	8.9	4.9	6.1	6.3	5.9	5.2	4.5	5.9
Subtotal intrinsic	45.8	50.7	38.3	50.4	54.7	45.6	46.0	54.9	37.3	49.7	53.4	46.5
Extrinsic												
Earnings and fringes	7.2	4.2	12.0	8.1	3.9	13.2	9.2	3.3	15.0	13.5	13.7	13.3
Job security	0.4	0.0	0.9	0.2	0.2	0.2	0.4	0.0	0.8	0.2	0.0	0.4
Hours of work	4.0	2.6	6.2	7.7	5.4	10.4	4.2	3.8	4.6	5.1	3.4	6.7
Working conditions	3.5	3.5	3.5	3.1	3.6	2.5	3.4	4.8	2.0	2.3	3.6	1.1
Limited pressure	1.0	0.7	1.3	1.1	0.8	1.6	2.7	2.3	3.0	1.5	1.0	1.9
Supervision	4.0	4.9	2.6	2.2	3.3	1.0	5.4	4.8	6.1	2.0	0.8	3.1
Interpersonal relationships	27.4	28.6	25.3	23.5	25.6	20.9	18.5	24.9	12.2	19.7	21.6	18.1
Company policy and administration	1.3	1.3	1.1	1.1	1.3	0.9	0.6	0.4	0.9	0.4	0.9	0.0
Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	3.4	2.8	4.3	0.7	0.9	0.4	2.2	1.0	3.2	1.2	1.1	1.2
Subtotal extrinsic	52.2	48.6	57.2	47.7	45.0	51.1	46.6	45.3	47.8	45.9	46.1	45.8
Unclassifiable	0.3	0.2	0.6	0.0	0.0	0.0	0.4	0.0	0.9	0.1	0.3	0.0
Nothing	1.7	0.4	3.9	1.6	0.1	3.4	7.0	0.0	13.9	4.2	0.3	7.8

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[a] Sample includes all respondents employed and not enrolled in school at the specific survey date.

Those highly satisfied with their jobs in each of the demographic groups, except the black middle-aged men, were more likely to give intrinsic, rather than extrinsic rewards, as their most preferred job aspects. With the exception of the young white men in 1970 and the middle-aged white men in 1971, the respondents who reported their jobs as less than highly satisfying in the initial and in the follow-up surveys tended to favor extrinsic over intrinsic rewards or simply liked "nothing at all" about their jobs. One possible interpretation of these differences between satisfied and dissatisfied workers is that the absence or inadequacy of intrinsic rewards produced the observed dissatisfaction.

The relationship between high job satisfaction and intrinsic preferences is particularly evident among white men, regardless of age, since three of five highly satisfied respondents indicated such preferences at both survey periods. A similar proportion of highly satisfied young black men also preferred intrinsic factors, but only during the initial survey in 1966. In 1970, this proportion declined markedly to about 50 percent. Among highly satisfied older black men, less than half (44 percent) reported an intrinsic preference in 1966, but this proportion increased to about 50 percent in 1971. Finally, between 51 and 55 percent of the highly satisfied women, regardless of age or race, stated intrinsic preferences in both survey periods.

With respect to specific factors liked most, the primary preference among the highly satisfied workers clearly was "the work itself," which encompasses the inherent job content as well as interesting, challenging, and meaningful work. With few exceptions, this preference prevailed in both the initial and follow-up surveys, despite the fact that each demographic group's numerical composition changed during the intervening years.[14] In the initial surveys, about two of five highly satisfied women, regardless of age and race, and a similar proportion of white middle-aged men gave "the work itself" as their job preference. Similarly, approximately one of three young white men, around 30 percent of the young black men, and about 27 percent of the older black men favored this factor. Other studies have shown a similar strong positive association between inherent job content and job satisfaction, and based on such findings, job enrichment, management-by-objectives, organizational development, and participative management are among the current strategies being tried by American management to increase job satisfaction.[15]

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[14] This main preference for interesting and challenging jobs on the part of American workers is consistent with a similar finding by Quinn and Mangione (1973) who also surveyed a national probability sample of workers. Although much variation was found across the studies, the specific groups surveyed, number and type of facets evaluated, and methodology, the preference for meaningful, interesting jobs clearly prevailed.

[15] For a comprehensive review of these strategies, their underlying rationale, and current developments in the United States, Western Europe, Sweden, England, Japan, and Peru, see: Davis and Cherns (1975, Vol. 1).

Next to work itself, "positive interpersonal relationships" (including supervision)[16] was the specific aspect of work preferred most by each of the demographic groups, especially the women. Regardless of age and race, about 30 percent of the highly satisfied women, compared to about 15 percent of the men, stated this preference in the initial surveys. This factor, in combination with "the work itself," accounts for approximately 70 percent of the preferences on the part of women in the initial surveys and about 64 percent in the follow-up surveys.[17] Responsibility and advancement opportunities, earnings and fringes, and hours of work constitute much of the remaining preferences of the women. In addition, similar to the older black men, the mature black woman revealed a liking for their competency to handle their work.

The preference for good interpersonal relations on the part of women may perhaps be attributed to their higher concentration in clerical and service occupations.[18] Many of these occupations are characterized by relatively low wage structures and minimal promotion opportunities, but require extensive interactions among fellow employees, management, and clients.

The preference for intrinsic factors on the part of highly satisfied NLS respondents still prevailed at the end of the period, even though the proportions reporting their jobs as highly satisfying tended to decline between the respective survey dates for each of the demographic groups, except for the young black men.[19] The decline in job satisfaction is especially pronounced among the older white men and the white women, regardless of age. The older white men still preferred intrinsic factors, but became increasingly concerned about their work environment in 1971 and their liking for job security, working conditions, and supervision diminished. Among the white women, a similar drop in the proportion who liked the work itself was more than offset by an increased liking for advancement opportunities and "other intrinsic" factors. While a larger proportion of the young black men reported themselves as highly satisfied in 1970, their preference for intrinsic factors dropped perceptibly from 61 percent to about 50 percent because of a growing disaffection with their capacity to do the work and with advancement opportunities. Concurrently, noticeable increases in liking job security, hours of work, working conditions, and earnings account for much of their growing job satisfaction, especially among the young black men who held jobs in both survey periods (see Table 7A.2).

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[16] Throughout this chapter, interpersonal relationships and supervision are frequently treated as one factor, since it is not entirely clear whether separate, independent factors were being alluded to by the respondents.

[17] The main exception to these trends occurred in the 1971 survey of young black women, when the proportion of highly satisfied workers who preferred interpersonal relationships (including supervision) dropped from about 30 percent to 22 percent, while their preference for earnings and fringes increased from 3 to 14 percent.

[18] For excellent descriptions of the status and condition of women in the world of work, see: Smuts (1971) and the I.L.O. Women Workers and Society (1976). The latter provides an international perspective covering Japan, Western Europe, Latin America, U.S.S.R., and Austria.

[19] See Chapter III of this volume for an analysis of levels and trends in job satisfaction among each of the NLS cohorts.

Finally, particularly among those less than highly satisfied with their jobs, there was a tendency within six of the eight demographic groups to become increasingly concerned with intrinsic work rewards during the 1966-1972 period. Except for the younger black men and the older black women, those less than highly satisfied with their jobs increased from 4 to 9 percentage points in the likelihood of stating an intrinsic preference over the course of the period.

V. ASPECT OF WORK DISLIKED MOST

For these same respondents, the aspects of work disliked most at each survey date are presented in Tables 7.5 through 7.8.[20] Extrinsic rather than intrinsic factors clearly are the most disliked aspects of work among each of the demographic groups. When level of job satisfaction is taken into consideration, extrinsic dislikes are even more pronounced, especially among those less than highly satisfied with their jobs. Some intrinsic factors are also evident, however, but they do not appear to be a principal source of dissatisfaction.

Among each of the demographic groups, the workers who were highly satisfied with their jobs consistently stated that "nothing at all" about their work was disliked. In the initial surveys, about one-third of the highly satisfied white men and about 45 percent of the highly satisfied white women gave this response. For highly satisfied black workers, the proportion ranged from about 40 percent for young black men to 53 percent for mature black women. At the end of the period, and although job satisfaction declined

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[20] Aspects of work disliked most by those employed through the entire period are presented in Appendix Tables 7A.5 through 7A.8. The findings are essentially the same for both groups.

TABLE 7.5
ASPECT OF WORK DISLIKED MOST BY MIDDLE-AGED MEN, 1966 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1966			1971			1966			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	3,152	1,821	1,331	2,351	1,104	1,247	1,166	597	569	813	400	413
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	4.5	2.9	7.0	3.8	1.9	5.6	3.5	1.5	5.5	2.4	1.2	3.6
Work is difficult	3.0	2.1	4.3	3.4	1.7	4.9	5.5	3.2	7.9	4.6	3.3	5.9
No responsibility or chance for advancement	0.7	0.4	1.2	0.4	0.2	0.7	0.4	0.2	0.6	0.7	0.2	1.3
Other intrinsic	6.1	6.2	6.0	14.6	14.6	14.5	3.5	3.7	3.2	8.8	6.2	11.4
Subtotal intrinsic	14.3	11.6	18.5	22.2	18.4	25.7	12.9	8.6	17.2	16.5	10.9	22.2
Extrinsic												
Earnings and fringes	9.0	8.1	10.3	6.6	5.1	8.0	16.3	10.5	22.4	7.8	5.1	10.7
Job insecurity	1.9	1.6	2.4	1.1	0.9	1.3	2.9	2.0	3.8	1.3	1.9	0.6
Hours of work	12.4	11.5	13.7	8.4	7.4	9.3	8.6	10.0	7.2	5.4	4.8	6.0
Working conditions	9.1	7.3	11.7	4.6	2.3	6.6	7.9	5.2	10.7	3.2	2.3	4.1
Too much pressure	5.1	4.9	5.5	3.9	2.7	4.9	2.4	1.9	2.9	1.1	0.8	1.5
Supervision	2.0	1.2	3.1	1.9	1.3	2.5	1.1	1.0	1.1	1.5	0.8	2.1
Interpersonal relationships	1.5	1.3	1.7	1.2	1.2	1.3	0.8	0.9	0.8	0.2	0.4	0.0
Company policy and administration	2.7	1.5	4.2	3.1	2.7	3.4	1.2	1.1	1.3	2.2	2.4	1.9
Union	0.2	0.1	0.2	0.4	0.1	0.7	0.1	0.1	0.0	0.2	0.4	0.0
Other extrinsic	5.5	5.6	5.3	3.8	3.2	4.4	5.1	4.7	5.4	3.5	2.5	4.4
Subtotal extrinsic	49.4	43.1	58.1	35.0	26.9	42.4	46.4	37.4	55.6	26.4	21.4	31.3
Unclassifiable	11.3	11.5	11.1	3.0	3.8	2.2	5.1	5.8	4.3	1.9	2.5	1.4
Nothing	24.9	34.0	12.3	39.9	51.0	29.9	35.8	48.3	22.7	55.1	65.1	45.0

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[a]Sample includes all respondents employed at the specific survey date.

TABLE 7.6
ASPECT OF WORK DISLIKED MOST BY YOUNG MEN, 1966 AND 1970, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

	Whites						Blacks					
	1966			1970			1966			1970		
Aspect of work disliked most	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,232	634	598	1,865	903	962	489	167	322	661	252	409
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	5.3	1.5	9.2	8.3	3.5	12.7	2.5	0.4	3.6	7.1	2.8	9.7
Work is difficult	2.4	2.0	2.9	2.1	1.5	2.6	5.9	1.1	8.4	4.6	1.4	6.5
No responsibility or chance for advancement	0.8	0.1	1.6	3.7	4.8	2.8	2.2	0.0	3.3	3.8	4.6	3.3
Other intrinsic	17.3	18.9	15.6	12.2	10.9	13.4	15.4	16.0	15.1	12.6	15.6	10.7
Subtotal intrinsic	25.8	22.5	29.3	26.3	20.7	31.5	26.0	17.5	29.4	28.1	24.4	30.2
Extrinsic												
Earnings and fringes	12.4	11.0	13.8	11.3	9.1	13.2	19.6	15.9	21.4	16.8	7.9	22.3
Job insecurity	1.2	1.0	1.3	1.2	1.3	1.1	2.1	1.5	2.5	0.9	0.5	1.1
Hours of work	13.3	11.4	15.3	12.4	12.3	12.4	8.6	8.7	8.6	7.3	[illegible]	7.8
Working conditions	3.8	2.1	5.5	5.5	2.2	8.5	3.4	3.3	3.5	3.8	[illegible]	4.5
Too much pressure	1.6	1.6	1.5	2.3	2.0	2.6	0.5	0.0	0.8	0.4	0.6	0.2
Supervision	3.3	2.1	4.6	3.2	2.0	4.2	2.4	1.0	3.2	2.0	1.0	2.6
Interpersonal relationships	1.5	1.3	1.7	1.6	1.5	1.8	1.2	2.4	0.6	1.4	0.9	1.7
Company policy and administration	3.1	2.5	3.6	4.0	3.0	4.9	2.7	1.0	3.6	2.5	2.4	2.5
Union	0.2	0.4	0.0	0.4	0.3	0.5	0.2	0.0	0.3	0.1	0.0	0.1
Other extrinsic	8.4	7.5	9.4	1.6	1.1	2.3	6.1	7.3	5.5	0.9	0.3	1.3
Subtotal extrinsic	48.2	40.8	56.7	43.0	34.8	51.5	46.8	41.1	50.0	36.1	22.6	44.1
Unclassifiable	2.8	3.9	1.6	0.6	0.5	0.7	0.2	0.6	0.0	0.1	0.0	0.1
Nothing	22.7	32.4	12.4	29.6	44.1	16.3	26.9	41.0	19.6	35.9	52.7	25.5

[a] Sample includes all respondents employed and not enrolled in school at the specific survey date.

Table 7.7

ASPECT OF WORK DISLIKED MOST BY MATURE WOMEN, 1967 AND 1972, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

	Whites						Blacks					
	1967			1972			1967			1972		
Aspect of work disliked most	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,619	1,097	522	1,633	950	683	809	430	379	681	339	342
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	3.8	1.0	9.6	3.7	1.2	7.2	5.0	0.5	10.6	3.7	1.2	6.4
Work is difficult	4.0	2.0	8.2	3.9	2.2	6.2	3.0	1.4	4.9	2.8	1.1	4.5
No responsibility or chance for advancement	0.5	0.2	1.0	0.3	0.3	0.3	0.5	0.6	0.3	0.3	0.2	0.5
Other intrinsic	13.5	14.8	10.7	18.8	17.9	20.1	11.0	7.9	14.8	16.9	16.0	17.8
Subtotal intrinsic	21.8	18.0	29.5	26.7	21.6	33.8	19.5	10.4	30.6	23.7	18.5	29.2
Extrinsic												
Earnings and fringes	6.7	5.6	8.9	6.9	6.4	7.5	14.4	10.6	19.3	10.5	8.7	12.4
Job insecurity	0.5	0.6	0.4	0.6	0.4	0.7	0.6	0.6	0.6	0.6	0.7	0.6
Hours of work	9.4	9.4	9.4	7.8	6.7	9.4	6.6	6.8	6.3	5.9	6.3	5.5
Working conditions	4.8	3.4	7.7	3.2	2.1	4.9	3.9	2.9	5.1	2.4	2.2	2.6
Too much pressure	4.1	3.5	5.4	4.7	4.1	5.6	1.6	1.3	2.0	1.0	0.9	1.2
Supervision	1.6	0.7	3.5	2.7	1.3	4.7	2.9	1.8	4.3	1.6	0.9	2.2
Interpersonal relationships	2.0	1.7	2.8	2.5	2.3	2.9	1.1	0.9	1.4	1.5	1.4	1.6
Company policy and administration	2.5	2.6	2.3	2.4	1.6	3.5	3.2	3.1	3.2	2.7	1.8	3.6
Union	0.1	0.1	0.2	0.3	0.3	0.1	0.2	0.4	0.0	0.2	0.0	0.5
Other extrinsic	5.7	5.2	6.8	4.7	4.1	5.4	5.6	6.7	4.4	5.0	4.2	5.8
Subtotal extrinsic	37.4	32.8	47.4	35.8	29.3	44.7	40.1	35.1	46.6	31.4	27.1	36.0
Unclassifiable	4.1	4.1	4.2	0.2	0.2	0.1	1.7	1.2	2.3	0.0	0.0	0.0
Nothing	36.6	45.2	18.6	37.4	48.7	21.5	38.6	53.2	20.5	44.7	54.4	34.9

[a]Sample includes all respondents employed at the specific survey date.

TABLE 7.8
ASPECT OF WORK DISLIKED MOST BY YOUNG WOMEN, 1968 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1968			1971			1968			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	936	574	362	1,304	697	607	323	157	166	494	234	260
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	9.2	3.0	18.9	10.5	4.9	17.1	6.2	2.0	10.2	6.4	2.5	10.0
Work is difficult	3.4	2.6	4.7	2.7	1.9	3.5	3.3	1.3	5.2	3.5	1.7	5.1
No responsibility or chance for advancement	1.4	0.9	2.1	3.5	2.9	4.4	1.2	1.0	1.4	3.1	2.6	3.6
Other intrinsic	9.7	9.7	9.7	15.1	14.7	15.6	8.2	8.2	8.3	7.5	8.7	6.5
Subtotal intrinsic	23.7	16.2	35.4	31.8	24.4	40.6	18.9	12.5	25.1	20.5	15.5	25.2
Extrinsic												
Earnings and fringes	8.2	8.2	8.3	9.4	6.8	12.4	11.8	8.5	14.9	10.1	5.5	14.2
Job insecurity	0.2	0.4	0.0	0.8	0.4	1.6	1.9	1.1	2.5	0.7	0.9	0.5
Hours of work	11.2	11.2	11.3	8.6	8.9	8.3	13.1	11.5	14.7	14.4	12.4	16.1
Working conditions	3.4	2.3	5.1	2.4	2.1	2.6	2.4	2.5	2.4	1.4	1.0	1.8
Too much pressure	4.1	3.4	5.2	4.1	3.5	4.7	3.1	3.5	2.7	1.4	1.0	1.7
Supervision	4.6	3.9	5.7	3.6	1.6	5.9	3.2	0.5	5.7	5.0	2.8	7.0
Interpersonal relationships	3.7	3.1	4.8	2.6	1.9	3.4	3.0	2.9	3.0	2.3	2.2	2.4
Company policy and administration	3.0	2.3	4.1	3.8	3.0	4.7	3.2	4.1	2.3	2.6	1.3	3.8
Union	0.0	0.0	0.1	0.2	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.3
Other extrinsic	3.8	3.3	4.5	2.6	1.3	3.9	4.2	4.9	3.6	0.4	0.3	0.3
Subtotal extrinsic	42.2	37.9	49.1	38.1	29.5	47.9	45.5	39.5	51.8	38.4	27.4	48.1
Unclassifiable	1.2	1.2	1.3	0.1	0.1	0.0	1.2	0.9	1.5	0.1	0.0	0.3
Nothing	32.8	44.5	14.1	29.8	46.0	11.0	34.1	47.1	21.5	41.0	57.1	26.4

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[a] Sample includes all respondents employed and not enrolled in school at the specific survey date.

within seven of the groups during the period, the proportion stating this response had increased, especially among the men, regardless of age and race, and among the young black women. The increases were from 12 to 17 percent among the highly satisfied men and about 10 percent among the highly satisfied young women.

As a result, in the early 1970's, approximately 45 to 50 percent of the white workers who were highly satisfied with their jobs, regardless of age and sex, found "nothing at all" about their jobs as a source of discontent. In comparison, an even larger proportion of their highly satisfied black counterparts, between 53 and 65 percent, held a similar view. However, only 11 to 26 percent of young workers less than highly satisfied with their jobs were of the same opinion.

In the initial surveys, among those less than highly satisfied with their jobs, approximately 50 percent of the women, regardless of age and race, about 50 percent of young black men, about 57 percent of all older men, and about 57 percent of the young white men reported extrinsic factors as the main source of dissatisfaction. Earnings and fringe benefits clearly predominated among dissatisfied black workers at the beginning of the period, regardless of age and sex, with 15 to 22 percent citing this factor. In addition, hours of work and working conditions were frequently mentioned by blacks. These same three sources of dissatisfaction also prevailed among dissatisfied whites at the first survey, but hours of work was the primary source of dissatisfaction, ranging from 9 to 15 percent, and followed closely by earnings and working conditions. Those who were highly satisfied with their jobs at the beginning of the period were considerably less inclined to report these factors as the source of any dissatisfaction.

By the end of the period, among those not highly satisfied, the proportions identifying extrinsic factors declined among each of the demographic groups, while concurrently the percentages reporting "nothing at all" as a source of dissatisfaction increased. These changes are most pronounced among the older men, with a decline of 25 percentage points in extrinsic factors for blacks compared to 16 points for whites. For both of these groups, working conditions, earnings (especially for blacks), and hours of work (especially for whites) became less of a source of dissatisfaction. Among mature women, the decrease was 11 percentage points for blacks and 3 points for whites.

While insufficient intrinsic rewards apparently were not a principal source of dissatisfaction, they did have some negative influence, especially among those who were dissatisfied, among the young, and among the mature women. They also appear to have become relatively more important a source of dissatisfaction by the end of the period within most of the groups. Among those who were less than highly satisfied with their jobs at the beginning of the period, about 25 percent of the black women, approximately 30 percent of the mature women and the young men, and about 35 percent of the young white women, compared to less than 20 percent of the older men, cited intrinsic factors as responsible for their job dissatisfaction. The nature of the work itself, for all demographic groups and especially the young white women, the difficulty of the work, especially among the black men and the mature white women, and a host of "other intrinsic" factors were most frequently mentioned.

In the follow-up surveys, among the less than highly satisfied workers, the reference to inadequate intrinsic rewards remained about the same or increased slightly within each demographic group. Of the increases noted, the most evident were 5 percent for older black men, 7 percent for older white men, and 5 percent for young white women.[21] A real or perceived decrease in opportunities for promotion or advancement apparently was particularly disconcerting to the young white women.

VI. CORRELATES OF INTRINSIC PREFERENCES AND SHIFTING PREFERENCES

To assess the correlates of intrinsic preferences and of shifts in preferences during the course of the period, multiple regression analysis has been used. For each of the eight demographic groups, three dependent variables capturing preferences and shifts thereof have been regressed on a number of personal, demographic, and job-related characteristics. The dependent variables include:[22] (1) an intrinsic preference at the end of the period, (2) a shift from an extrinsic to an intrinsic preference during the period, and (3) a shift from an intrinsic to an extrinsic preference during the period. The first is assigned a 100 if the respondent reported an intrinsic preference at the last survey date and 0 otherwise; the second is assigned a 100 if the respondent shifted from an extrinsic to an intrinsic preference, and 0 if the respondent stated an extrinsic preference at both the first and last survey dates; and the third is assigned a 100 if the respondent shifted from an intrinsic to an extrinsic preference, and 0 if the respondent stated an intrinsic preference at both survey dates.[23] Regression coefficients thus may be interpreted as the percentage change in a dependent variable associated with a one unit change in an explanatory variable, other things held equal.

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[21] Among highly satisfied workers, even though the percentage of workers who gave intrinsic dislikes is noticeably smaller compared to those who are less than highly satisfied, the proportion citing intrinsic factors in the follow-up surveys similarly remained either relatively stable or increased, not only among the older white men (about 6 percent) and young white women (about 8 percent), but also among the young black men (6 percent) and mature black women (8 percent). As shown in Appendix Table 7A.6, among the young black men who held jobs in both 1966 and 1970, the increase in intrinsic dislikes was even greater (about 11 percent) as diminished opportunities for advancement or responsibility, the difficult nature of the work, and "other intrinsic" factors became increasing sources of concern, despite their increase in overall job satisfaction.

[22] In this portion of the analysis, data were not as accessible as for the previous analyses. The period under investigation thus is 1966-1971 for the older men, 1966-1969 for the young men, 1967-1971 for the mature women, and 1968-1970 for the young women.

[23] In each case, preferences were ascertained by way of responses to the question about the aspects of work liked best by workers.

The personal, demographic, and job-related characteristics included in the regression for each dependent variable are: (1) annual earnings in the year prior to the initial survey, (2) change in annual earnings over the course of the period, (3) occupational status at the beginning of the period, (4) change in occupational status over the course of the period, (5) change of employer during the period, (6) weeks of unemployment during the period, (7) weeks out of the labor force during the period, (8) completion of formal occupational training prior to the beginning of the period, (9) completion of formal occupational training during the course of the period, (10) health status during the course of the period, (11) length of service with employer as of the beginning of the period, (12) age, or years of work experience prior to the first survey date, (13) marital status during the course of the period, (14) region of residence at the beginning of the period, (15) city size, (16) geographic mobility during the course of the period, and (17) years of schooling. These variables are the same ones examined as correlates of levels and trends in job satisfaction in chapter three (section VI). Each is measured in the identical manner, and pertains to the same time period, as detailed in chapter three. The results of these regressions are presented by cohort, and within cohorts by race, in Tables 7.9 through 7.12.

It is evident from the data in these tables that several explanatory variables are clearly associated with intrinsic preferences and with shifts in preferences. Intrinsic preferences, for example, are more pronounced among workers who had received job training either prior to the initial survey or between surveys, compared to those without any training. The main exception is among the older black women, where those who received training before 1967 were more likely than those without any training to subsequently shift their preferences from intrinsic to extrinsic factors. Similarly, workers in higher status jobs at the time of the initial surveys or who increased their occupational status during the period were more inclined to favor intrinsic factors. Some of the older white men with high status jobs in 1966 and the older black women whose job status changed were, however, more likely than their respective counterparts, to change from intrinsic to extrinsic choices in 1971.

In 1971, among the older white men, the propensity to switch to extrinsic factors is more noticeable among those aged 60-64 than those aged 50-54, and among those workers whose health either remained a problem throughout the period or improved. Among the older black men, those aged 60-64, with bad health throughout the period, or with improved health, clearly favored intrinsic work rewards. Young black workers, with health problems, regardless of sex, also made changes in preferences, but mainly from intrinsic to extrinsic preferences.

Educational attainment does not appear to have any systematic influence upon the preferences of the older women, regardless of race, or the older white men. Among the older black men and the younger white men, however,

TABLE 7.9

REGRESSION RESULTS: FACTORS ASSOCIATED WITH AN INTRINSIC PREFERENCE IN 1971 AND WITH CHANGES IN INTRINSIC-EXTRINSIC PREFERENCES BETWEEN 1966 AND 1971, AMONG WHITE AND BLACK MIDDLE-AGED MEN[a]

(t - ratios)

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
55-59 years of age, 1971	-3.0 (1.16)	1.0 (0.22)	8.0 (2.01)**	-0.3 (0.51)	2.0 (0.38)	-3.0 (0.37)
60-64 years of age, 1971	-10.0 (2.98)***	-9.0 (1.72)*	12.0 (2.49)**	11.0 (1.94)*	15.0 (2.01)**	-15.0 (1.60)
Years of schooling, 9-11	-0.3 (0.94)	-3.0 (0.64)	-5.0 (1.04)	0.1 (0.20)	-1.0 (0.19)	-0.2 (0.23)
Years of schooling, 12	-3.0 (0.71)	-2.0 (0.40)	1.0 (0.14)	-3.0 (0.40)	-8.0 (0.92)	-10.0 (0.77)
Years of schooling, 13 or more	3.0 (0.73)	4.0 (0.55)	-3.0 (0.46)	-19.0 (1.74)*	-27.0 (1.89)*	-3.0 (0.14)
Received training, prior to 1966	8.0 (2.95)***	5.0 (1.35)	-10.0 (2.84)***	0.2 (0.41)	13.0 (1.84)*	13.0 (1.58)
Received training, 1966 - 1971	-0.1 (1.10)	-0.2 (1.03)	1.0 (0.45)	0.2 (1.50)	0.3 (1.32)	-0.2 (0.76)
Improved health, 1966 - 1971	-3.0 (0.76)	5.0 (0.72)	13.0 (2.15)**	18.0 (2.27)**	12.0 (1.11)	-32.0 (2.43)**
Deteriorated health, 1966 - 1971	5.0 (1.06)	4.0 (0.63)	-7.0 (1.15)	6.0 (0.77)	7.0 (0.78)	-1.0 (0.81)
Bad health, 1966 and 1971	-1.0 (0.28)	5.0 (0.71)	10.0 (1.69)*	16.0 (1.93)*	25.0 (2.06)**	-7.0 (0.56)
Single, never married, 1966 - 1971	3.0 (0.47)	-5.0 (0.65)	-6.0 (0.77)	12.0 (1.94)*	12.0 (1.42)	-9.0 (0.88)
Divorced, 1966 - 1971	-6.0 (0.72)	3.0 (0.25)	17.0 (1.48)	4.0 (0.50)	11.0 (1.15)	9.0 (0.60)
Married between 1966 and 1971	-6.0 (0.29)	3.0 (0.16)	8.0 (0.38)	28.0 (1.80)*	26.0 (1.26)	-31.0 (1.29)
Resides outside central city, 1966	1.0 (0.29)	1.0 (0.31)	4.0 (0.91)	-8.0 (1.05)	-4.0 (0.37)	6.0 (0.53)
Resides inside central city, 1966	4.0 (1.20)	7.0 (1.42)	-1.0 (0.27)	-1.0 (0.19)	-0.2 (0.29)	-9.0 (0.92)
Resides in South, 1966	1.0 (0.32)	4.0 (1.01)	2.0 (0.58)	2.0 (0.39)	1.0 (0.12)	-5.0 (0.59)
Geographic mobility, 1966 and 1971	0.4 (0.76)	-1.0 (0.71)	-1.0 (1.09)	-1.0 (0.38)	0.2 (1.05)	0.5 (1.70)*

TABLE 7.9 continued

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
Tenure, 2-9 years, 1966	2.0 (0.50)	-5.0 (0.81)	-8.0 (1.39)	-0.3 (0.46)	-3.0 (0.29)	-1.0 (0.68)
Tenure, 10-19 years, 1966	0.2 (0.51)	-8.0 (1.19)	-6.0 (0.96)	-11.0 (1.57)	-15.0 (1.61)	4.0 (0.29)
Tenure, 20 or more years, 1966	1.0 (0.22)	-8.0 (1.16)	-8.0 (1.72)	-9.0 (1.30)	-13.0 (1.34)	1.0 (0.76)
Job satisfaction, 1966	7.0 (3.82)***	7.0 (2.58)***	-4.0 (1.45)	2.0 (0.53)	2.0 (0.46)	9.0 (1.48)
Occupational status, 1966	0.2 (2.11)**	-1.0 (0.70)	0.3 (2.58)***	0.3 (1.68)*	1.0 (2.64)***	-0.5 (0.18)
Change, occupational status, 1966 - 1971	0.1 (1.13)	0.2 (1.47)	0.5 (0.40)	-0.4 (0.24)	0.2 (0.74)	0.5 (1.53)
Involuntary mobility, 1966 - 1971	-5.0 (1.04)	-1.0 (0.11)	10.0 (1.48)	2.0 (0.31)	11.0 (1.06)	3.0 (0.19)
Voluntary mobility, 1966 - 1971	-1.0 (0.30)	2.0 (0.32)	7.0 (1.22)	2.0 (0.33)	-6.0 (0.62)	-17.0 (1.40)
Annual earnings, 1965	0.2 (0.75)	1.0 (1.01)	0.1 (0.35)	0.1 (1.32)	-0.4 (0.25)	-0.2 (1.02)
Change annual earnings, 1965 - 1970	-0.4 (1.00)	-0.4 (0.68)	0.4 (0.90)	-1.0 (0.10)	-0.5 (0.43)	-0.2 (0.91)
Out of labor force, weeks, 1966 - 1971	0.2 (1.09)	1.0 (0.30)	-0.3 (1.34)	1.0 (0.31)	0.2 (0.63)	1.0 (0.28)
Unemployed, weeks, 1966 - 1971	0.1 (0.74)	-0.3 (0.16)	-0.3 (1.30)	0.2 (0.77)	0.2 (0.70)	1.0 (0.12)
Constant	55.0 (8.49)***	56.0 (5.84)***	44.0 (4.98)***	35.0 (3.08)***	29.0 (1.94)*	79.0 (4.09)***
R^2	0.044	0.034	0.082	0.060	0.104	0.098
Number of sample cases	1521	726	775	620	362	253

[a] The sample includes male respondents, 45 to 59 years of age in 1966, who were employed fulltime at both the 1966 and 1971 survey dates.

*** $p < .01$ (two-tailed tests).

** $p < .05$ (two-tailed tests).

* $p < .10$ (two-tailed tests).

TABLE 7.10

REGRESSION RESULTS: FACTORS ASSOCIATED WITH AN INTRINSIC PREFERENCE IN 1969 AND WITH CHANGES IN INTRINSIC-EXTRINSIC PREFERENCES BETWEEN 1966 AND 1969, AMONG WHITE AND BLACK YOUNG MEN[a]

(t - ratios)

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1969	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1969	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
Years of schooling, 9-11	-6.0 (0.76)	-12.0 (0.89)	-2.0 (0.20)	8.0 (0.69)	-21.0 (1.37)	-44.0 (2.58)***
Years of schooling, 12	-5.0 (0.59)	-12.0 (0.84)	-6.0 (0.56)	-1.0 (0.60)	-18.0 (0.91)	-29.0 (1.50)
Years of schooling, 13 or more	-11.0 (1.09)	-34.0 (2.06)**	-11.0 (0.86)	-17.0 (0.86)	-25.0 (0.90)	-23.0 (0.77)
Received training, prior to 1966	0.2 (0.53)	-3.0 (0.41)	-4.0 (0.71)	4.0 (0.42)	4.0 (0.31)	-11.0 (0.79)
Received training, 1966 - 1969	11.0 (2.61)***	10.1 (2.19)**	-1.0 (1.06)	1.0 (1.00)	10.4 (3.00)***	0.1 (1.05)
Health improved, 1966 - 1969	-7.0 (1.00)	-7.0 (0.64)	7.0 (0.81)	-12.0 (0.72)	47.0 (1.61)	52.0 (2.31)**
Health deteriorated, 1966 - 1969	2.0 (0.22)	-13.0 (0.70)	-5.0 (0.35)	-7.0 (0.27)	46.0 (0.93)	71.0 (2.07)**
Bad health, 1966 and 1969	-6.0 (0.51)	0.3 (0.15)	10.0 (0.72)	-29.0 (1.26)	78.0 (2.13)**	103.0 (3.37)***
Single, never married, 1966 - 1969	-9.0 (1.58)	-19.0 (2.18)**	-2.0 (0.28)	1.0 (0.66)	-19.0 (1.34)	-21.0 (1.82)*
Divorced, 1966 - 1969	1.0 (0.15)	2.0 (0.13)	5.0 (0.38)	22.0 (1.62)	-10.0 (0.51)	-47.0 (2.53)**
Married, between 1966 and 1969	2.0 (0.32)	-3.0 (0.41)	-6.0 (0.98)	1.0 (0.15)	-17.0 (1.30)	-28.0 (2.04)**
Resides outside central city, 1966	-3.0 (0.72)	-12.0 (1.74)*	-4.0 (0.71)	2.0 (0.14)	13.0 (0.77)	-9.0 (0.52)
Resides inside central city, 1966	1.0 (0.29)	-2.0 (0.23)	-2.0 (0.36)	-12.0 (1.37)	1.0 (0.85)	4.0 (0.37)
Resides in South, 1966	-12.0 (2.80)***	-12.0 (1.83)*	10.0 (1.73)*	22.0 (2.08)**	28.0 (1.85)*	4.0 (0.24)
Geographic mobility, 1966 - 1969	0.4 (0.82)	0.3 (0.38)	-1.0 (1.23)	0.1 (0.11)	1.0 (0.47)	0.3 (0.24)
Tenure, 2 or more years, 1966	-1.0 (0.98)	-1.0 (0.83)	1.0 (0.38)	-1.0 (0.66)	4.0 (1.15)	2.0 (0.63)

Table 7.10 continued.

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1969	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1969	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
Work experience, years, 1966	0.4 (0.39)	-2.0 (1.38)	-3.0 (1.87)*	1.0 (0.59)	-1.0 (0.29)	-4.0 (1.72)*
Job satisfaction, 1966	2.0 (0.64)	2.0 (0.44)	-8.0 (2.07)**	-3.0 (0.57)	3.0 (0.42)	7.0 (0.96)
Occupational status, 1966	0.2 (1.61)	0.3 (1.42)	-1.0 (0.32)	1.0 (2.97)***	-1.0 (0.15)	-1.0 (2.89)***
Change, occupational status, 1966 - 1969	0.3 (0.24)	0.1 (0.53)	0.5 (0.32)	1.0 (2.04)**	0.2 (0.38)	-0.2 (0.47)
Changed job	-2.0 (0.43)	6.0 (0.87)	11.0 (1.95)*	-5.0 (0.72)	-2.0 (0.14)	9.0 (0.94)
Annual earnings, 1965	-0.5 (0.47)	-0.2 (0.15)	1.0 0.71)	0.4 (0.15)	-0.1 (0.31)	0.3 (0.82)
Change, annual earnings, 1965 - 1968	1.0 (0.87)	0.3 (0.37)	-0.1 (1.20)	-1.0 (0.46)	1.0 (0.17)	0.2 (0.64)
Out of labor force, weeks, 1966 - 1969	1.0 (0.25)	0.2 (0.58)	1.0 (0.19)	0.3 (0.92)	1.0 (1.35)	1.0 (1.26)
Unemployed, weeks, 1966 - 1969	0.4 (1.41)	-1.0 (0.94)	1.0 (1.81)*	0.1 (0.24)	-0.5 (0.77)	-0.3 (0.42)
Constant	60.0 (4.20)***	83.0 (3.48)***	63.0 (3.41)***	13.0 (0.42)	-11.0 (0.21)	72.0 (1.78)*
R^2	0.045	0.092	0.076	0.127	0.379	0.302
Number of sample cases	763	318	438	256	115	139

[a] The sample includes male respondents, 14 to 24 years of age in 1966, who were employed fulltime and not enrolled in school at both the 1966 and 1969 survey dates.

*** p < .01 (two-tailed tests).

** p < .05 (two-tailed tests).

* p < .10 (two-tailed tests).

TABLE 7.11

REGRESSION RESULTS: FACTORS ASSOCIATED WITH AN INTRINSIC PREFERENCE IN 1971 AND WITH CHANGES IN INTRINSIC-EXTRINSIC PREFERENCES BETWEEN 1967 AND 1971, AMONG WHITE AND BLACK MATURE WOMEN[a]

(t - ratios)

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
40-44 years of age, 1971	-1.0 (0.25)	-2.0 (0.34)	0.4 (0.63)	10.0 (1.70)*	4.0 (0.42)	-5.0 (0.62)
45-49 years of age, 1971	5.0 (1.08)	-0.2 (0.36)	-8.0 (1.23)	1.0 (0.96)	-9.0 (0.97)	-6.0 (0.67)
Years of schooling, 9-11	-9.0 (1.30)	-7.0 (0.74)	2.0 (0.19)	3.0 (0.50)	1.0 (0.14)	-13.0 (1.21)
Years of schooling, 12	-8.0 (1.16)	-5.0 (0.53)	7.0 (0.72)	-2.0 (0.30)	6.0 (0.53)	12.0 (1.13)
Years of schooling, 13 or more	2.0 (0.25)	-3.0 (0.26)	-7.0 (0.61)	4.0 (0.40)	18.0 (1.15)	11.0 (0.70)
Received training, prior to 1967	-6.0 (1.45)	-3.0 (0.52)	9.0 (1.61)	-5.0 (0.73)	3.0 (0.36)	14.0 (1.71)*
Received training, 1967 - 1971	0.4 (1.02)	11.0 (1.70)*	0.3 (0.58)	1.0 (1.23)	1.0 (0.11)	-0.1 (1.58)
Bad health, 1967 and 1971	-3.0 (0.33)	-5.0 (0.46)	-16.0 (0.78)	3.0 (0.19)	14.0 (0.73)	35.0 (1.60)
Deteriorated health, 1967 - 1971	-1.0 (0.10)	-4.0 (0.37)	-3.0 (0.25)	13.0 (1.39)	20.0 (1.38)	-3.0 (0.25)
Married, no child age < 6, 1967	2.0 (0.21)	7.0 (0.64)	-2.0 (0.20)	12.0 (1.05)	42.0 (2.30)**	2.0 (0.16)
Married, with child age < 6, 1967	1.0 (0.22)	3.0 (0.35)	3.0 (0.30)	3.0 (0.39)	6.0 (0.48)	-15.0 (1.32)
Not married, with child age < 6, 1967	-6.0 (0.87)	-8.0 (0.90)	-3.0 (0.35)	-2.0 (0.29)	7.0 (0.73)	-11.0 (1.12)
Married, between 1967 and 1971	2.0 (0.38)	5.0 (0.60)	1.0 (0.10)	1.0 (0.13)	9.0 (1.03)	-13.0 (1.41)
Divorced, between 1967 and 1971	-11.0 (0.69)	-31.0 (1.14)	9.0 (0.45)	-17.0 (1.26)	5.0 (0.24)	44.0 (2.49)**
Had child, during 1967 - 1971	-2.0 (0.14)	-6.0 (0.37)	-9.0 (0.47)	5.0 (0.34)	-6.0 (0.22)	-4.0 (0.15)
Resides outside central city, 1967	-8.0 (1.84)*	-13.0 (2.12)**	3.0 (0.55)	-8.0 (0.92)	14.0 (0.90)	26.0 (2.10)**

TABLE 7.11 continued

(t - ratios)

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1971	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
Resides inside central city, 1967	-5.0 (1.00)	-2.0 (0.27)	7.0 (1.07)	-7.0 (1.05)	-1.0 (0.11)	15.0 (1.64)*
Resides in South, 1967	-10.0 (2.59)***	-11.0 (1.99)**	7.0 (1.23)	1.0 (0.10)	0.3 (0.33)	-2.0 (0.30)
Geographic mobility, 1967 - 1971	-0.5 (0.72)	-0.1 (1.14)	0.2 (0.19)	-1.0 (0.76)	1.0 (0.67)	0.2 (1.15)
Years of tenure, 1967	-1.0 (1.61)	-1.0 (2.04)**	-0.4 (0.77)	-1.0 (1.10)	0.3 (0.49)	1.0 (1.54)
Job satisfaction, 1967	0.2 (0.58)	-2.0 (0.55)	1.0 (0.29)	4.0 (1.22)	-1.0 (0.12)	-8.0 (1.39)
Work experience, since leaving school	0.4 (1.26)	1.0 (1.04)	-0.4 (0.74)	0.3 (0.64)	-0.2 (0.33)	-1.0 (1.66)*
Employed fulltime, 1967	3.0 (0.57)	1.0 (0.14)	2.0 (0.28)	5.0 (0.78)	11.0 (1.16)	-2.0 (0.15)
Occupational status, 1967	0.4 (3.20)***	0.4 (2.69)***	-0.2 (1.29)	0.4 (2.08)**	0.2 (0.52)	-1.0 (2.84)***
Change, occupational status, 1967 - 1971	0.2 (1.36)	0.3 (1.53)	-1.0 (0.35)	-1.0 (0.25)	1.0 (1.38)	1.0 (1.93)*
Annual earnings, 1966	0.2 (1.72)*	0.2 (1.27)	-0.1 (0.80)	0.3 (0.16)	-0.3 (0.89)	1.0 (0.20)
Change, annual earnings, 1966 - 1970	0.4 (0.70)	-0.5 (0.58)	-0.1 (1.58)	0.1 (0.86)	0.4 (2.29)**	0.3 (1.06)
Out of labor force, weeks, 1967 - 1971	1.0 (0.68)	0.5 (0.41)	-1.0 (0.56)	1.0 (0.56)	-1.0 (0.37)	0.3 (0.14)
Unemployed, weeks, 1967 - 1971	0.1 (0.71)	0.2 (0.69)	-0.3 (0.80)	0.4 (0.17)	0.2 (0.43)	1.0 (0.17)
Constant	37.0 (3.21)***	26.0 (1.68)*	49.0 (2.92)***	28.0 (2.08)**	5.0 (0.22)	36.0 (2.96)***
R^2	0.073	0.091	0.078	0.099	0.125	0.233
Number of sample cases	850	437	404	457	226	223

[a] The sample includes female respondents, 30 to 44 years of age in 1967, who were employed fulltime at both the 1967 and 1971 survey dates.

*** $p < .01$ (two-tailed tests).

** $p < .05$ (two-tailed tests).

* $p < .10$ (two-tailed tests).

TABLE 7.12

REGRESSION RESULTS: FACTORS ASSOCIATED WITH
AN INTRINSIC PREFERENCE IN 1970 AND WITH CHANGES
IN INTRINSIC-EXTRINSIC PREFERENCES BETWEEN
1968 AND 1970, AMONG WHITE AND BLACK YOUNG WOMEN[a]

(t - ratios)

Explanatory Variables	Whites			Blacks		
	Intrinsic Preference in 1970	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift	Intrinsic Preference in 1970	Extrinsic to Intrinsic Shift	Intrinsic to Extrinsic Shift
Years of schooling, 9-11	3.0 (0.23)	13.0 (0.59)	-4.0 (0.20)	-22.0 (1.26)	-12.0 (0.41)	43.0 (1.82)*
Years of schooling, 12	14.0 (0.96)	36.0 (1.63)	-3.0 (0.18)	-14.0 (0.78)	14.0 (0.49)	41.0 (1.55)
Years of schooling, 13 or more	19.0 (1.16)	39.0 (1.64)*	-11.0 (0.52)	9.0 (0.41)	15.0 (0.43)	14.0 (0.48)
Received training, prior to 1968	-5.0 (1.09)	-5.0 (0.74)	4.0 (0.62)	19.0 (2.38)**	11.0 (0.78)	-14.0 (1.22)
Rec'd trn'g or certificate, since 1968	-0.5 (0.10)	1.0 (1.14)	1.0 (1.03)	10.2 (2.27)**	0.2 (1.31)	-0.2 (1.43)
Improved health, 1968 - 1970	10.0 (0.78)	15.0 (0.74)	-8.0 (0.52)	-5.0 (0.24)	-39.0 (1.24)	-25.0 (0.90)
Deteriorated health, 1968 - 1970	14.0 (1.18)	3.0 (0.19)	-20.0 (1.22)	-13.0 (0.62)	13.0 (0.44)	68.0 (1.98)**
Bad health, 1968 and 1970	-12.0 (0.77)	-20.0 (1.00)	0.4 (0.16)	b	b	b
Married, between 1968-- 1970	-9.0 (1.58)	-9.0 (1.15)	10.0 (1.38)	26.0 (2.29)**	14.0 (0.82)	-32.0 (1.81)*
Had child, during 1968 - 1970	3.0 (0.34)	-3.0 (0.28)	-7.0 (0.63)	22.0 (1.78)*	21.0 (1.08)	-17.0 (0.89)
Resides outside central city, 1968	-1.0 (0.12)	1.0 (0.84)	-1.0 (0.19)	15.0 (1.20)	18.0 (0.80)	5.0 (0.25)
Resides inside central city, 1968	-4.0 (0.71)	1.0 (0.17)	10.0 (1.23)	11.0 (1.15)	14.0 (0.86)	-5.0 (0.34)
Resides in South, 1968	-4.0 (0.90)	-6.0 (0.88)	5.0 (0.67)	15.0 (1.83)*	28.0 (2.16)**	-4.0 (0.35)
Geographic mobility, 1968 - 1970	0.2 (0.44)	1.0 (0.68)	0.4 (0.58)	-1.0 (0.57)	-0.3 (0.14)	0.42 (0.26)
Years of tenure 1968	-3.0 (1.44)	-5.0 (2.17)**	0.1 (0.58)	1.0 (0.55)	-1.0 (0.24)	-3.0 (1.6[illegible])
Work experience, years, 1968	3.0 (2.35)**	3.0 (1.44)	-4.0 (1.86)*	-2.0 (0.86)	1.0 (0.20)	2.0 (0.88)
Job satisfaction, 1968	-0.3 (0.10)	1.0 (0.26)	-1.0 (0.15)	2.0 (0.38)	5.0 (0.70)	1.0 (0.19)

TABLE 7.12 continued

(t - ratios)

Explanatory Variables	Whites: Intrinsic Preference in 1970	Whites: Extrinsic to Intrinsic Shift	Whites: Intrinsic to Extrinsic Shift	Blacks: Intrinsic Preference in 1970	Blacks: Extrinsic to Intrinsic Shift	Blacks: Intrinsic to Extrinsic Shift
Occupational status, 1968	0.3 (1.88)*	0.4 (0.19)	-1.0 (2.43)**	-0.4 (1.36)	-1.0 (1.53)	-0.1 (0.29)
Change, occupational status, 1968 - 1970	0.4 (2.34)**	0.1 (0.44)	-1.0 (3.05)***	0.1 (0.35)	-0.4 (0.64)	-1.0 (1.60)
Annual earnings, 1967	1.0 (0.41)	0.1 (0.46)	0.1 (0.38)	-0.5 (1.27)	0.1 (0.19)	0.4 (0.76)
Change, annual earnings, 1967 - 1969	0.2 (1.48)	0.4 (1.71)*	0.5 (0.19)	-0.5 (1.55)	-1.0 (0.11)	1.0 (1.39)
Out-of labor force, weeks, 1968 - 1970	0.1 (0.83)	0.3 (1.32)	0.2 (0.64)	-1.0 (2.94)***	-1.0 (0.12)	1.0 (2.90)***
Unemployed, weeks, 1968 - 1970	-0.5 (0.91)	0.3 (0.31)	1.00 (1.44)	-1.0 (1.27)	-0.1 (0.13)	1.0 (1.48)
Constant	15.0 (0.83)	-2.0 (0.71)	71.0 (2.91)***	70.0 (2.77)***	18.0 (0.38)	3.0 (0.98)
R^2	0.053	0.091	0.098	0.224	0.230	0.343
Number of sample cases	558	281	291	186	93	102

[a] The sample includes female respondents, 14 to 24 years of age in 1968, who were employed fulltime and not enrolled in school at both the 1968 and 1970 survey dates.

[b] Variable did not enter regression due to insufficient sample cases.

*** $p < .01$ (two-tailed tests).

** $p < .05$ (two-tailed tests).

* $p < .10$ (two-tailed tests).

those with 13 or more years of schooling, compared to those with only eight years or less, clearly reveal either a preference for extrinsic factors or are less likely to change from extrinsic to intrinsic preferences during the period. Also, young black women with some high school education are more likely to shift in 1970 to extrinsic from intrinsic preferences, than are those without any high school background. The young white women with 13 or more years of schooling and young black men with some high school education do, however, reveal a greater preference for intrinsic factors. Compared to their respective counterparts with eight or fewer years of schooling, the former were more inclined to shift from extrinsic to intrinsic factors, while the latter were less likely to change from intrinsic to extrinsic preferences.

Relative to region and area of residence, no consistent preference patterns or trends prevail among the demographic groups. Young blacks, living in the South, regardless of sex, were more likely than their counterparts living outside the South to favor intrinsic rewards. Conversely, young white men and older white women living in the South clearly preferred extrinsic factors. Also, mature black women living in urban areas in 1967 were more inclined than their counterparts residing in rural areas to shift preferences to extrinsic factors. Only among the older black men is a change of residence or geographic mobility to another county or SMSA during the period associated with a change in preferences.

In addition, no consistent association exists between marital status and preferences. Single workers or those who married during the period were more likely than those married throughout the period to prefer intrinsic factors or to retain intrinsic preferences throughout the period. This is most evident among blacks. In contrast, young white men who were single throughout the period were more likely to retain extrinsic preferences, while the mature black women who experienced a divorce between 1967 and 1971 were more likely to shift from intrinsic to extrinsic preferences.

Job-related variables also have some effect upon the preferences and the changes noted, but as with many of the variables discussed, extensive variations prevail across the various demographic groups. For example, a tendency to change from intrinsic to extrinsic factors is most noticeable among the young white men who experienced greater weeks of unemployment during the period or who changed jobs, and among the young black women who experienced a greater number of weeks out of the labor force between surveys. A preference for extrinsic factors or a reluctance to shift to intrinsic factors is also evident among the white women with greater seniority prior to the initial surveys, regardless of age.

In contrast, workers with greater work experience since leaving school were not as inclined to shift from intrinsic to extrinsic preferences during the period as those with less work experience. This is more pronounced among the older black women, the younger men, and the young white women. Among the older black women and the young white women, those who experienced a greater change in their annual earnings between surveys were also more likely to change from extrinsic to intrinsic preferences during the period.

Finally, an association between job satisfaction levels measured in the initial surveys and intrinsic preferences is not pronounced, except among the older white men.[24] For this demographic group, the highly satisfied workers are much more inclined than their less satisfied counterparts to report an intrinsic preference, or to shift to such a preference during the period. In comparison, among the young white men, those who are highly satisfied were more likely to change from intrinsic to extrinsic factors during the period, than were the less satisfied workers.

VII. SUMMARY AND CONCLUSIONS

With respect to aspects of work liked best, there appears to be a consistent relationship between the preferences for intrinsic factors and high job satisfaction. Clearly those who were highly satisfied with their jobs in each of the demographic groups, except the older black men, were more likely to mention such factors, especially the nature of the work itself and opportunities for increased responsibility or advancement. Conversely, those who reported their jobs as less than highly satisfying tended to prefer extrinsic to intrinsic factors, or simply to find "nothing at all" about their jobs as a factor to be liked.

While there is a relationship between job satisfaction and intrinsic preferences, the strength of the association may have been overstated, particularly in the research by Herzberg cited earlier. Among the white men, regardless of age, the relationship is pronounced, since about 60 percent of the highly satisfied workers consistently **reported** intrinsic preferences during the period. With the exception of these men, however, from 40 to 50 percent of the highly satisfied respondents in the remaining demographic groups were quite inclined to mention extrinsic factors as sources of job satisfaction. Among women, a strong preference for good interpersonal relations and supervision is noted; among blacks, earnings, favorable hours of work, and good working conditions were also frequently mentioned. Many of the jobs held by blacks and women, of course, may not provide a wide range of interesting intrinsic possibilities, so it may make very little sense for blacks and women to talk about such aspects as "challenging work," "promotion opportunities," and "use of one's talents."

Regarding the aspects of work disliked most, it is evident that extrinsic rather than intrinsic factors clearly predominate among each of the eight demographic groups. This is particularly the case among the workers who were not highly satisfied with their jobs. While insufficient intrinsic rewards were not a principal source of dissatisfaction, they did have some negative effect, particularly among those dissatisfied with their jobs, among the younger workers, regardless of sex and race, and among the older women. Furthermore, there is some evidence that dissatisfied workers were becoming more concerned about intrinsic rewards during the period.

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[24] As observed earlier, there is a "gross" relationship between job satisfaction and intrinsic preferences within each of the eight demographic groups, except the older black men. This relationship is not as evident in the regressions when personal, demographic, and job-related differences between satisfied and dissatisfied workers are held constant.

The data in this chapter do not, however, readily support the hypothesis of a significant change in work ethic during the late sixties and early seventies since shifts in preferences were generally small during the 3-5 year period studied. Nonetheless, and despite the fact that job satisfaction declined during the period within seven of the eight demographic groups, preferences for intrinsic factors continued to prevail or to increase during the period. Intrinsic preferences, and shifts from extrinsic to intrinsic preferences, were particularly noticeable among whites, regardless of age and sex; among workers in higher status jobs; and among those who had previous training, and thus presumably were more qualified for "better" jobs.

The implications of these findings for policymakers are multi-faceted. It is important to recognize that both intrinsic and extrinsic factors appear to be systematically related to job satisfaction. It is essential, therefore, to provide continuous employment, safe and healthful jobs, earnings which maintain purchasing power, and fringe benefits aimed at enhancing leisure opportunities (vacations, holidays) as well as protecting against the exigencies of life. The recent collective bargaining settlements in the automobile industry and the "employment security" issues which apparently predominated in the recent steel industry negotiations undoubtedly attest to organized labor and management's concern over extrinsic factors. There is also a continuing need, however, to improve the intrinsic aspects of work; e.g., designing jobs to effectively tap personal competencies, providing more meaningful feedback of performance results, affording opportunities for increased responsibility and advancement, as well as personal involvement in decision making. To this end, a number of programs are currently being undertaken by American industry which involve joint labor-management cooperation and experimentation. Yet as Irving Bluestone (1976), U.A.W. Vice President, aptly concluded in noting the inevitably limited potential of any approach failing to consider the complexity of human preferences:

> Quality of worklife embraces a much broader concept than is represented by the terms job enrichment, job enlargement, or any of the other catch phrases which have commonly been used in recent years. Realigning and redesigning jobs are important components of improving the quality of worklife, but standing alone they do not meet the objective of creating job satisfaction; there must be as well the opportunity for active and direct participation in the decision-making process.

TABLE 7A.1

ASPECT OF WORK LIKED BEST BY MIDDLE-AGED MEN EMPLOYED AT BOTH SURVEY DATES, 1966 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1966			1971			1966			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	2,237	1,293	944	2,237	1,048	1,189	760	411	349	760	373	387
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	35.3	40.6	28.0	32.5	38.1	27.3	24.7	27.4	21.5	22.2	24.3	20.1
Capacity to do work	3.2	2.9	3.8	4.3	3.4	5.2	9.0	9.8	8.0	9.9	9.3	10.4
Responsibility or advancement	14.5	14.9	14.0	14.5	15.7	13.7	6.3	7.0	5.4	11.1	12.1	10.1
Other intrinsic	2.0	1.9	2.0	5.8	5.6	6.0	2.0	0.6	3.7	4.8	5.0	4.5
Subtotal intrinsic	55.0	60.3	47.8	57.1	62.8	52.2	42.0	44.8	38.6	47.0	51.7	45.1
Extrinsic												
Earnings and fringes	10.9	7.9	15.2	10.2	7.4	12.7	15.0	13.9	15.9	12.3	12.3	12.2
Job security	3.6	2.7	4.9	3.1	1.6	4.4	5.9	4.3	7.9	4.6	4.1	4.9
Hours of work	4.3	3.4	5.5	4.4	3.4	5.4	5.0	3.8	6.3	4.8	5.6	4.0
Working conditions	5.4	5.5	5.3	2.9	3.5	2.3	6.3	5.4	7.4	3.1	3.3	2.9
Limited pressure	1.7	1.2	2.3	1.9	1.3	2.4	3.6	4.0	3.1	1.9	1.5	2.2
Supervision	2.5	2.[illegible]	2.3	1.6	1.9	1.4	6.0	5.9	6.2	6.8	4.3	9.3
Interpersonal relationships	11.2	11.9	10.3	11.4	13.9	9.0	7.2	9.4	4.6	10.9	12.9	8.9
Company policy and administration	2.3	2.7	1.8	1.7	2.3	1.1	4.7	5.7	3.6	2.6	2.6	2.5
Union	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	1.8	1.6	2.0	2.8	1.6	3.9	2.2	2.2	2.4	2.4	1.8	2.9
Subtotal extrinsic	43.8	39.6	49.7	40.0	36.9	42.6	55.9	54.6	57.4	49.4	48.4	49.8
Unclassifiable	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nothing	1.0	0.1	2.2	2.8	0.2	5.1	2.1	0.6	3.7	2.9	0.7	5.1

[a] Sample includes only those respondents employed at the time of both the 1966 and 1971 survey dates.

TABLE 7A.2

ASPECT OF WORK LIKED BEST BY YOUNG MEN EMPLOYED AT BOTH SURVEY DATES, 1966 AND 1970, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1966			1970			1966			1970		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	910	486	424	910	443	467	326	111	215	326	138	188
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	30.5	34.2	26.3	27.5	32.8	22.6	28.8	29.5	28.4	18.0	28.0	11.0
Capacity to do work	6.5	7.0	6.0	4.3	4.0	4.6	9.6	9.5	9.6	5.9	5.5	6.2
Responsibility or advancement	9.8	11.7	7.7	16.5	18.4	14.8	6.1	11.3	3.5	7.5	5.7	8.7
Other intrinsic	9.5	8.9	10.3	8.7	8.3	9.1	8.0	11.1	6.4	7.8	8.5	7.4
Subtotal intrinsic	56.3	61.8	50.3	57.0	63.5	51.1	52.5	61.4	47.9	39.2	47.7	33.3
Extrinsic												
Earnings and fringes	12.2	8.0	17.0	11.9	7.5	15.9	12.0	5.7	15.4	10.5	6.9	13.7
Job security	0.5	0.8	0.2	1.5	0.5	2.4	1.1	0.0	1.7	4.3	2.2	2.9
Hours of work	5.8	3.7	8.5	5.0	3.4	6.5	5.5	5.0	5.7	10.2	7.4	12.1
Working conditions	2.7	3.6	1.7	5.1	6.1	4.2	2.9	1.9	3.5	2.5	3.5	1.8
Limited pressure	1.5	1.4	1.6	1.4	0.8	2.0	2.5	4.2	1.6	2.1	1.9	2.2
Supervision	3.3	3.8	2.7	2.0	1.9	2.2	3.3	3.2	3.3	4.6	6.1	3.5
Interpersonal relationships	11.0	10.4	11.6	10.1	13.1	7.4	6.9	8.6	6.1	10.7	8.0	12.4
Company policy and administration	2.1	3.2	0.9	1.8	1.9	1.7	3.9	6.2	2.7	2.9	4.0	2.2
Union	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	2.8	2.6	3.0	0.9	0.9	1.1	4.1	1.7	5.5	3.3	7.7	0.7
Subtotal extrinsic	42.0	37.5	47.5	39.7	36.1	43.5	42.2	36.5	45.5	51.1	51.7	50.3
Unclassifiable	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Nothing	1.4	0.6	2.2	3.1	0.3	5.7	5.0	2.0	6.6	9.8	0.6	16.2

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[a] Sample includes only those respondents not enrolled in school and employed at the time of both the 1966 and 1970 survey dates.

TABLE 7A.3

ASPECT OF WORK LIKED BEST BY MATURE WOMEN EMPLOYED AT BOTH SURVEY DATES, 1967 AND 1972, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1967			1972			1967			1972		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,079	729	350	1,079	614	465	522	291	231	522	254	368
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	36.0	41.5	24.5	32.8	37.7	26.2	36.0	40.1	30.3	29.5	35.2	23.9
Capacity to do work	1.8	1.6	2.1	2.4	1.7	3.3	4.2	5.3	2.7	5.3	6.4	4.2
Responsibility or advancement	5.9	5.9	5.8	9.6	10.0	10.0	4.7	4.8	4.6	5.1	4.3	5.8
Other intrinsic	3.5	3.3	3.9	5.2	6.2	3.7	4.1	4.3	3.9	5.6	6.9	4.4
Subtotal intrinsic	47.2	52.3	36.3	50.0	55.6	42.2	49.0	54.5	41.5	45.5	52.8	38.3
Extrinsic												
Earnings and fringes	7.0	4.6	12.0	6.2	2.9	10.6	5.1	3.9	6.5	6.7	2.8	10.5
Job security	0.1	0.0	0.3	0.6	0.7	0.5	0.1	0.0	0.3	1.7	2.3	1.1
Hours of work	5.3	3.9	8.0	6.5	5.1	8.3	7.3	3.7	12.2	6.1	3.7	8.4
Working conditions	2.5	2.3	2.8	2.6	3.1	2.0	3.0	2.8	3.2	2.3	2.3	2.3
Limited pressure	1.1	0.5	2.3	1.3	1.7	0.7	1.5	0.8	2.5	1.5	0.6	2.5
Supervision	4.0	4.4	3.2	2.7	2.6	2.9	12.1	14.0	9.6	6.4	5.1	7.7
Interpersonal relationships	24.2	24.6	23.4	23.4	24.1	22.7	11.7	15.0	7.2	16.2	21.5	11.2
Company policy and administration	1.4	1.8	0.7	1.8	2.3	1.1	1.1	1.0	1.3	2.9	4.2	1.6
Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	4.9	3.9	7.0	3.6	2.0	5.7	3.7	3.1	4.5	5.0	4.5	5.4
Subtotal extrinsic	50.0	46.0	59.7	48.7	44.5	54.5	45.6	44.3	47.3	48.8	47.0	50.7
Unclassifiable	0.9	1.3	0.3	0.0	0.0	0.0	0.5	0.2	0.8	0.0	0.0	0.0
Nothing	1.5	0.5	3.7	1.5	0.0	3.3	4.9	0.8	10.4	5.7	0.2	10.9

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[a] Sample includes only those respondents employed at the time of both the 1967 and 1972 survey dates.

TABLE 7A.4
ASPECT OF WORK LIKED BEST BY YOUNG WOMEN EMPLOYED AT BOTH SURVEY DATES, 1968 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work liked best	Whites						Blacks					
	1968			1971			1968			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	507	316	191	507	289	218	182	90	92	182	78	104
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	34.5	40.5	25.4	34.7	37.4	31.2	37.7	45.8	29.1	37.8	50.5	27.8
Capacity to do work	3.0	1.3	5.8	3.0	1.6	4.9	4.7	4.2	5.3	6.2	1.7	9.9
Responsibility or advancement	7.8	8.5	6.3	9.0	10.8	6.5	1.8	2.6	1.1	4.1	2.8	5.0
Other intrinsic	3.7	3.5	4.2	5.8	7.2	4.0	3.3	2.3	4.3	3.3	0.0	5.9
Subtotal intrinsic	49.0	53.8	41.0	52.5	57.0	46.6	47.5	54.9	39.8	51.5	55.0	48.6
Extrinsic												
Earnings and fringes	7.7	5.4	11.5	9.8	4.3	17.3	10.0	2.8	17.5	14.8	14.0	15.5
Job security	0.6	0.3	1.0	0.2	0.1	0.5	0.4	0.0	0.8	0.5	0.0	0.9
Hours of work	3.6	1.6	6.8	7.1	4.9	10.0	5.5	4.8	6.1	7.6	2.4	11.6
Working conditions	4.3	4.7	3.7	3.4	3.5	3.2	2.6	2.5	2.8	2.0	2.8	1.3
Limited pressure	0.8	0.6	0.1	1.3	0.8	1.9	2.5	4.0	0.9	2.3	1.0	3.3
Supervision	3.9	5.1	2.1	2.2	3.5	0.5	4.8	3.8	5.7	0.9	0.0	1.6
Interpersonal relationships	24.4	25.6	22.6	21.2	24.5	16.8	17.9	25.5	10.0	14.0	22.7	7.0
Company policy and administration	1.4	1.6	1.0	0.9	1.1	0.6	1.2	0.7	1.6	0.0	0.0	0.0
Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	2.0	1.2	3.1	0.5	0.3	0.7	1.6	1.0	2.3	1.3	2.1	0.7
Subtotal extrinsic	48.7	46.1	51.9	46.6	43.0	51.5	46.5	45.1	47.7	43.4	45.0	41.9
Unclassifiable	0.2	0.0	0.5	0.0	0.0	0.0	0.5	0.0	1.0	.0	0.0	0.0
Nothing	2.2	0.0	5.8	0.9	0.0	1.8	5.6	0.0	11.4	5.2	0.0	9.3

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[a] Sample includes only those respondents not enrolled in school and employed at the time of both the 1968 and 1971 survey dates.

TABLE 7A.5
ASPECT OF WORK DISLIKED MOST BY MIDDLE-AGED MEN EMPLOYED AT BOTH SURVEY DATES, 1966 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1966			1971			1966			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	2,237	1,293	944	2,237	1,048	1,189	760	411	349	760	373	387
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	4.2	2.8	6.6	3.6	1.7	5.4	2.2	1.3	3.5	2.6	1.2	3.8
Work is difficult	3.1	2.2	4.4	3.4	1.7	4.9	5.2	3.5	7.3	4.7	3.6	5.8
No responsibility or chance for advancement	0.7	0.5	0.9	0.4	0.2	0.7	0.2	0.2	0.3	0.7	0.2	1.1
Other intrinsic	6.2	6.6	5.7	14.5	14.2	14.7	3.2	2.8	3.6	8.8	5.9	11.7
Subtotal intrinsic	14.2	12.1	17.6	21.9	17.8	25.0	10.8	7.8	14.7	16.6	10.9	22.4
Extrinsic												
Earnings and fringes	9.4	8.0	11.3	6.7	5.2	7.9	15.6	11.6	20.3	7.8	4.8	10.7
Job insecurity	1.4	0.9	2.2	1.2	0.9	1.4	2.6	1.6	3.9	1.0	1.7	0.5
Hours of work	12.7	12.3	13.3	8.3	7.5	9.1	8.2	8.8	7.5	5.6	5.2	6.0
Working conditions	9.3	7.6	11.6	4.7	2.4	6.7	8.2	5.8	11.1	3.4	2.5	4.4
Too much pressure	5.6	5.4	5.8	4.0	2.8	5.1	2.5	1.0	4.2	1.2	0.9	1.6
Supervision	1.9	1.3	2.8	1.6	1.2	2.3	0.8	0.9	0.8	1.5	0.9	2.0
Interpersonal relationships	1.5	1.5	1.5	1.3	1.2	1.4	1.2	1.3	1.0	0.2	0.4	0.0
Company policy and administration	2.8	1.6	4.6	3.0	2.6	3.4	1.4	1.0	1.8	2.2	2.4	2.1
Union	0.1	0.2	0.0	0.4	0.1	0.6	0.1	0.2	0.0	0.2	0.4	0.0
Other extrinsic	5.8	5.9	5.5	3.8	3.0	4.5	5.1	4.0	6.3	3.5	2.7	4.2
Subtotal extrinsic	50.5	44.7	58.6	35.2	26.9	42.4	45.7	35.9	56.9	26.6	21.9	31.5
Unclassifiable	10.8	11.0	10.7	3.0	3.9	2.2	5.5	6.4	4.3	2.1	2.7	1.5
Nothing	24.0	31.9	13.0	40.0	51.5	29.6	38.0	49.6	24.3	54.5	64.4	44.7

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[a] Sample includes only those respondents employed at the time of both the 1966 and 1971 survey dates.

TABLE 7A.6

ASPECT OF WORK DISLIKED MOST BY YOUNG MEN EMPLOYED AT BOTH SURVEY DATES, 1966 AND 1970, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1966			1970			1966			1970		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	910	486	424	910	443	467	326	111	215	326	138	188
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	5.1	1.4	9.1	5.9	3.2	10.4	2.4	0.6	3.2	6.0	1.3	9.3
Work is difficult	3.2	1.7	2.9	1.6	0.8	2.3	5.7	0.0	8.8	4.5	2.3	6.0
No responsibility or chance for advancement	0.8	0.2	1.4	3.6	4.1	3.1	0.5	0.0	0.8	3.1	4.3	2.2
Other intrinsic	17.4	17.9	16.8	11.2	10.3	12.1	13.5	11.7	14.4	13.2	15.1	11.9
Subtotal	25.6	21.2	30.2	23.3	18.4	27.9	22.1	12.3	27.2	26.8	23.0	29.4
Extrinsic												
Earnings and fringes	12.6	11.8	13.6	10.4	7.9	12.7	22.0	17.6	24.3	17.7	7.7	24.6
Job insecurity	1.1	1.1	1.0	1.5	1.7	1.3	1.4	0.7	1.9	1.1	0.5	1.4
Hours of work	14.2	12.3	16.4	15.1	15.1	15.0	10.5	11.5	10.0	6.5	6.0	6.9
Working conditions	4.1	2.1	6.3	5.1	1.9	8.1	3.4	0.6	4.9	3.9	3.0	4.6
Too much pressure	1.3	1.7	0.8	2.2	1.8	2.6	0.3	0.0	0.4	0.3	0.6	0.0
Supervision	2.8	1.5	3.5	2.8	2.3	3.4	2.6	1.4	3.3	1.1	0.6	1.5
Interpersonal relationships	1.4	1.4	1.4	1.6	1.8	1.5	1.5	2.9	0.7	1.6	1.5	1.6
Company policy and administration	3.0	2.7	3.2	4.6	3.4	5.8	1.4	0.7	1.8	2.1	2.8	1.5
Union	0.3	0.5	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.3
Other extrinsic	7.7	6.3	9.1	1.6	1.2	1.9	5.8	7.1	5.2	0.8	0.5	1.0
Subtotal extrinsic	48.5	42.4	55.1	45.0	36.9	52.6	48.9	42.5	52.5	35.2	23.2	43.4
Unclassifiable	3.1	4.1	1.9	1.0	0.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Nothing	23.0	32.2	12.7	30.6	43.8	18.3	29.1	45.2	20.3	38.1	53.8	27.1

[a] Sample includes only those respondents not enrolled in school and employed at the time of both the 1966 and 1970 survey dates.

TABLE 7A.7

ASPECT OF WORK DISLIKED MOST BY MATURE WOMEN EMPLOYED AT BOTH SURVEY DATES, 1967 AND 1972, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1967			1972			1967			1972		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	1,079	729	350	1,079	614	465	522	291	231	522	254	268
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	3.6	1.0	9.0	3.9	1.4	7.2	3.7	0.5	8.0	4.0	0.6	7.2
Work is difficult	4.[illegible]	2.2	8.0	3.4	2.0	5.4	3.4	1.4	6.2	2.9	0.8	4.9
No responsibility or chance for advancement	0.5	0.1	1.2	0.2	0.0	0.5	0.7	0.9	0.4	0.2	0.3	0.3
Other intrinsic	13.9	15.5	10.7	19.1	18.4	20.1	11.5	10.0	13.5	16.7	14.6	18.8
Subtotal intrinsic	22.1	18.8	28.9	26.6	21.8	33.2	19.3	12.8	28.1	23.8	16.3	31.2
Extrinsic												
Earnings and fringes	6.7	5.7	8.7	6.6	6.1	7.4	14.1	9.9	19.9	11.4	9.1	13.7
Job insecurity	0.7	0.8	0.6	0.6	0.7	0.5	0.7	0.6	0.6	0.6	0.6	0.6
Hours of work	9.4	9.5	9.1	8.1	6.5	10.2	6.3	6.0	6.6	6.5	6.6	6.4
Working conditions	4.4	3.2	7.0	2.9	1.8	4.5	4.4	4.1	4.8	2.7	2.5	2.9
Too much pressure	4.3	3.4	6.3	4.8	4.0	5.8	1.9	1.9	1.9	1.0	1.2	0.8
Supervision	1.8	0.8	3.8	3.1	1.3	5.5	2.2	0.5	4.4	0.9	0.6	1.1
Interpersonal relationships	2.2	1.6	3.3	2.3	2.4	2.2	1.4	0.8	2.3	1.9	1.8	2.0
Company policy and administration	2.8	2.7	3.1	2.4	1.3	3.8	3.8	3.6	3.0	3.5	2.4	4.6
Union	0.1	0.1	0.0	0.3	0.5	0.0	0.1	0.2	0.0	0.3	0.0	0.6
Other extrinsic	5.8	5.7	6.2	4.9	3.8	6.2	5.4	7.0	3.2	4.6	3.8	5.4
Subtotal extrinsic	38.2	22.5	48.1	35.0	28.4	46.1	40.1	34.0	46.7	33.4	28.6	38.1
Unclassifiable	3.8	3.4	4.6	0.3	0.3	0.2	0.6	0.0	1.4	0.0	0.0	0.0
Nothing	35.8	44.1	18.6	37.2	49.6	20.6	39.8	52.6	22.8	42.7	55.1	30.8

[a] Sample includes only those employed at the time of both the 1967 and 1972 survey dates.

TABLE 7A.8

ASPECT OF WORK DISLIKED MOST BY YOUNG WOMEN EMPLOYED AT BOTH SURVEY DATES, 1968 AND 1971, BY RACE AND DEGREE OF JOB SATISFACTION[a]

(Percentage Distribution)

Aspect of work disliked most	Whites						Blacks					
	1968			1971			1968			1971		
	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied	Total	Highly satisfied	Not highly satisfied
Number of respondents	507	316	191	507	289	218	182	90	92	182	78	104
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intrinsic												
The work itself	9.5	3.9	19.2	9.9	4.3	17.4	7.1	3.6	10.8	6.8	0.0	12.0
Work is difficult	2.2	1.7	3.1	2.0	1.6	2.4	2.8	0.8	4.8	2.0	0.0	3.6
No responsibility or chance for advancement	1.5	1.3	1.7	2.7	2.3	3.3	0.9	1.7	0.0	1.4	2.2	0.7
Other intrinsic	9.2	7.7	11.7	15.7	15.7	15.7	7.7	6.4	9.2	5.6	7.0	4.5
Subtotal intrinsic	22.4	14.6	35.7	30.3	23.9	38.8	18.5	12.5	24.8	15.8	9.2	20.2
Earnings and fringes	7.9	9.2	5.8	9.0	5.2	14.0	10.9	6.0	16.0	11.4	9.1	13.0
Job insecurity	0.0	0.0	0.0	0.6	0.4	1.0	0.9	1.0	0.8	0.3	0.0	0.6
Hours of work	11.3	10.5	12.6	9.2	9.3	9.0	16.9	18.2	15.6	14.5	12.2	16.4
Working conditions	2.4	1.2	4.5	2.5	3.0	1.7	0.9	0.0	1.8	2.1	0.9	3.0
Too much pressure	4.3	4.2	4.4	3.9	2.8	5.5	2.6	4.2	1.0	2.5	2.9	2.3
Supervision	5.9	5.0	7.5	3.6	2.5	5.1	3.3	0.0	6.8	10.0	4.6	14.2
Interpersonal relationships	4.3	3.4	5.7	3.4	2.9	4.0	4.9	5.1	4.6	3.3	4.2	2.5
Company policy and administration	3.5	3.1	4.3	3.3	2.4	4.5	3.7	3.9	3.4	2.7	0.0	4.7
Union	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other extrinsic	4.4	3.7	5.5	1.7	0.8	3.0	5.1	3.5	6.6	0.0	0.0	0.0
Subtotal extrinsic	44.1	40.3	50.5	37.2	29.3	47.7	49.2	40.9	56.6	46.8	33.9	56.7
Unclassifiable	1.3	1.4	1.1	0.2	0.3	0.0	1.3	0.9	1.8	0.0	0.0	0.0
Nothing	32.1	43.7	12.6	32.4	46.4	13.5	31.2	44.9	16.8	37.5	56.9	22.5

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[a] Sample includes only those respondents not enrolled in school and employed at the time of both the 1968 and 1971 survey dates.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Paul J. Andrisani and Robert C. Miljus

The principal purpose of this volume has been to address empirically, by way of the available data from the National Longitudinal Surveys, three broad sets of questions that shed light on the role of worker attitudes in the dynamics of employment experience and address major issues in the recent "quality of working lives" controversy. These questions may be summarized briefly as follows:

(1) Are individual differences in work-related attitudes systematically related to differences in subsequent labor market experience among workers who are comparable in terms of a wide range of dimensions of skills, abilities, and demographic characteristics? For instance, are differences among comparable individuals in worker satisfaction, expectations, aspirations, "tastes" for economic versus noneconomic rewards, and commitment to work in one period related to such experiences as turnover, unemployment, withdrawal from the work force, and occupational and earnings advancement in the next?

(2) How do workers feel about a variety of aspects of work, and are any trends apparent? What are the actual reasons that workers offer for both their satisfaction and dissatisfaction with work? In general, what has work come to mean to the nation's work force? In particular, what has it come to mean to those who are dissatisfied with their jobs? Is dissatisfaction with pay, hours of work, and working conditions less apparent than dissatisfaction with the "meaninglessness" of work? Is there evidence of changing preferences or "tastes" for various aspects of work which may signal a changing work ethic?

(3) What characteristics of jobs and workers are systematically related to important work attitudes? More importantly, to what extent does one's labor market experience condition changes in attitudes toward work? Can an understanding of differences in work attitudes between the young and middle-aged, between men and women, and between whites and blacks contribute to a better understanding of the marked differences in their labor market experience?

The NLS data provide clear evidence of the importance of work attitudes in conditioning subsequent labor market behavior. For each of the eight NLS age-sex-race groups, the relationship between job dissatisfaction and turnover is unmistakable, suggesting that highly dissatisfied workers were from 14 to 42 percentage points more likely than comparable highly satisfied workers to subsequently change employers (Chapter II). The evidence also suggests that job dissatisfaction imposes considerable costs on workers in terms of increased unemployment, decreased labor force participation, and below-average growth both in annual earnings and occupational attainment. Furthermore, the data show that the costs of dissatisfaction reflect more than the costs of turnover which were borne disproportionately by dissatisfied workers. Among comparable workers who did not change employers, there is considerable evidence that dissatisfied workers were below-average in occupational and earnings advancement. Among those who changed employers, the dissatisfied were generally above-average in weeks of unemployment as well. The evidence thus suggests that job dissatisfaction often leads to reduced productivity and to job changing that has been less carefully planned than that which takes place among comparable satisfied workers. Since the dissatisfied stand less to lose if their new jobs are not satisfactory, they apparently are less reluctant to leave a job without securing a new one beforehand.

The NLS data also provide strong and consistent evidence that individuals with an "internal locus of control" -- i.e., who perceive payoffs to their initiative -- subsequently experience greater labor market success than their contemporaries who perceive less payoffs to their efforts (Chapter IV). The Coleman Report (1966) found that differences in these attitudes were a more important factor in explaining achievement among black youth than all of the differences in school quality and family background combined. "Internal-external attitudes" are also of interest because of a similarity to the concept of alienation, and because some have maintained that racial differences in labor market experience stem mainly from racial differences in work ethic attitudes closely resembling the internal-external distinction. While the NLS data suggest that attitudinal change among individuals who perceive little payoff to their personal initiative would result in greater initiative and more successful labor market experience, there is little reason to suspect that the elimination of racial differences in these attitudes would have an appreciable impact upon black-white differences in work experience. In the main, blacks differ only minimally from whites in these attitudes.

Quite similarly, differences among otherwise comparable workers in career goals, expectations of achieving goals, commitment to work, attitudes toward one's work role, attitudes toward the propriety of working mothers, and spouse's attitude toward one's work role have all been shown to bear a relationship to subsequent labor market experience (Chapters V and VI). In particular, the career goals of male youth, both black and white, and a belief that one's goals are attainable, are strongly related to a successful transition from school to work (Chapter V). As another example, a strong commitment to work at the first survey date is shown to result in fewer weeks out of the labor force over the next 4-5 years among those in the older cohorts, greater investments in training among young women and older men, and greater labor market advancement among the younger and older women. In addition, white women who perceived their husbands as unfavorably disposed toward their working advanced less in earnings and occupational status over the next four years, experienced more unemployment and weeks out of the labor force, and were less likely to receive formal occupational training than comparable women whose husbands did not object to their working. It thus seems clear that work attitudes add to our understanding of the process of labor market attainment, and do not merely reflect personal and demographic differences among workers that give rise to labor market experience. Nor do cross-sectional relationships between work attitudes and work experience reflect exclusively the influence of the latter on the former.

How do workers feel about their jobs? Fewer than 15 percent of the workers within any of the eight age-sex-race groups reported that they disliked their jobs during the 1966-1972 period (Chapter III). Blacks, however, tended to be less satisfied with their jobs than whites, youth tended to be less satisfied than older workers, and women tended to be more highly satisfied than men. Furthermore, job satisfaction declined from 5 to 13 percentage points during the 1966-1972 period within seven of the eight age-sex-race groups. Since virtually all of the decline was from "highly satisfied" to "somewhat satisfied," rather than from "satisfied" to "dissatisfied," it is likely that the often-cited absence of a downward trend in job satisfaction in the national data reported by Quinn et al. (1974) resulted from an aggregation bias in their classification of responses to the job satisfaction question.

The consistent downward trends in job satisfaction are due more to trends within certain occupations than to trends within all major occupations (Chapter III). Contrary to the popular notion of "blue collar blues," the trends are least consistent and meaningful among operatives and laborers and most consistent and meaningful among white collar workers, craftsmen, service workers, farmers and farm managers. Also inconsistent with popular beliefs, white youths in blue collar and service occupations were no less satisfied with their jobs than their middle-aged counterparts. In the aggregate, the rise in job dissatisfaction is linked to the overall state of the economy and to a slight overall shift during the period in the preferences and tastes of workers toward more "intrinsic" work rewards.

Much of the costs of job dissatisfaction also appear to be linked to labor market imperfections, since the dissatisfied were disproportionately relegated to low paying and low status jobs (Chapters II and III). By far the most consistent and systematic correlates of job satisfaction and of changes in satisfaction are labor market imperfections, causing comparable workers to vary widely in earnings, occupational status, and promotional opportunities. These findings point clearly to the need for reduction of barriers to mobility which prevent the labor market from attaining an optimal allocation of human resources and from maximizing the job satisfaction of workers. Factors only weakly linked to job satisfaction include training, health problems, seniority, age, and marital status. Furthermore, except for male youth, there is surprisingly little evidence that job changers were any less likely to evince a rise in job dissatisfaction than nonchangers. There are several exceptions to these generalizations, however, since marital instability among black women and the onset of health problems among middle-aged men were found to be more common among those who experienced a decline in job satisfaction than among those who did not. Nonetheless, it appears that measures other than, or in addition to, increasing the earnings and occupational status of dissatisfied workers are required to reduce the costs of job dissatisfaction. According to these data, the dissatisfied within several of the subgroups would be more prone to turnover, increased unemployment, decreased labor force participation, and generally below-average growth in earnings even if their wage rates and occupational status were initially equal to those of comparable workers more highly satisfied with their jobs.

Moreover, there is little indication of either a growing or especially strong interest in economic rewards during the course of the period (Chapters II, III, V, and VII). While students of labor-management relations would expect "bread and butter" factors to play a prominent role in shaping the job satisfaction of workers, the NLS data clearly do not support such a role. Within none of the age-sex-race groups, for example, and at no point during the 1966-1972 period, did as many as 25 percent of workers who were "not highly satisfied" with their jobs report that inadequate earnings were the principal reason for their job dissatisfaction. Similarly, at no point during the 1966-1972 period did as many as 15 percent of the "highly satisfied" workers within any of the age-sex-race groups report that earnings were what they liked best about their jobs. These responses were also consistent with those elicited when workers were asked whether "liking the work" or "wages" was the more important aspect of a good job. Only among blacks did as many as 20 percent respond that wages were more important than liking the work.

Within virtually all of the eight age-sex-race groups, workers highly satisfied with their jobs reported that the factors they liked best about their work were "intrinsic" in character -- i.e., inherent in the job content rather than job context (Chapter VII). Among women, the importance of good interpersonal relations and supervision is also shown in the data. Among workers not highly satisfied with their jobs, the aspects of work disliked most tend to be considerably more "extrinsic" in nature than "intrinsic," yet there appeared to be a growing sentiment among the dissatisfied during the 1966-1972 period for "intrinsic" work rewards. There is little reason, however, on the basis of these data for the 1966-1972 period, to suspect that a major change in work ethic recently occurred, or that workers are concerned exclusively with either economic or noneconomic, "intrinsic" or "extrinsic" work rewards.

Reinforcing these findings are NLS data showing only slight age differences in other work ethic attitudes, suggesting that while younger workers may be more dissatisfied with their jobs than their older counterparts, they appear no less committed to the value system of the mainstream of the American work force (Chapter V). For example, while 73-78 percent of white and black middle-aged men reported they would continue to work if they received enough money to live comfortably without working, even more of their younger counterparts responded similarly. Likewise, there appears to be little difference between the younger and older women in response to the same question; nor is there any difference between the younger and older cohorts in commitment to the Protestant work ethic that hard work leads to success (Chapter IV). Furthermore, while there is some evidence that younger workers are more dissatisfied with their jobs than older workers because of insufficient intrinsic rewards, these differences undoubtedly reflect at least to some degree the vast differences in occupations and years of work experience between younger and older workers, rather than solely secular changes in preferences and "tastes" during the recent past (Chapters III and VII).

With respect to other work attitudes, young men and young women of both races aspired to considerably greater occupational heights than either they or the older cohorts had attained (Chapter V). As they aged 2-3 years, occupational aspirations of the youth cohorts changed little. However, 29-37 percent of the male youth believed their chances of attaining their goals were only "fair" at best. Among the young women in 1968, 64 percent of the whites and 35 percent of the blacks planned to be married, keeping a house, and raising a family at age 35 rather than working. Among both cohorts of women, roughly 30-40 percent responded that they would retire if they were to receive enough money to live comfortably without working. Of the older white women, more than one-fourth said they would stay home if they lost their current job, rather than find another job, and nearly one-third of them planned to stay home rather than work five years later. Moreover, at the first survey date about three-fourths of the black women and about 85 percent of the white women in both cohorts were unfavorably disposed toward mothers with young children working if they chose to do so but their husbands disagreed. Furthermore, among both cohorts of women, about 20 percent of those who were married and working viewed their husbands as negatively disposed toward their working. These perceptions of spouses' attitudes changed little over the next five years, although women, particularly the whites, became somewhat more liberal in their own attitudes toward women's work roles between 1967 and 1972.

Among the two cohorts of youth, racial differences in occupational aspirations were substantial throughout the 1966-1969 period (Chapter V). White young men were also one and one-half times as likely as their black counterparts to believe that their chances of attaining their goals were "excellent." Young women, however, differed little from the male youth in aspirations, but both cohorts of women appeared less committed to work in the market than their male counterparts. Yet there were virtually no age, sex, or race differences in internal-external attitudes, or in the component tapping Protestant work ethic beliefs (Chapter IV). In sum, age-sex-race differences in work attitudes are in many cases quite small, as are the effects of many of the attitudes on certain aspects of subsequent labor market experience. Thus, although the data do not permit us to be entirely sure, and although work attitudes in the main appear to be important determinants of subsequent labor market success, it appears unlikely that attitudinal change alone would be sufficient to eliminate the vast differences in work experience between young and old, men and women, and whites and blacks.

Reinforcing this conclusion is the fact that work experience has been shown to affect the attitudes which people come to hold. For example, while internal-external attitudes appear to represent stable personality dimensions, there is reason to believe that the attitudinal change which occurs is nonrandom, even among middle-aged men, and thus the initiative of workers could be influenced by public policy prescriptions (Chapter IV). Also, the link between labor market imperfections and several work attitudes is clear and consistent, demonstrating the importance of favorable work experience for the holding of favorable attitudes toward work (Chapters II, III, and V).

Nevertheless, there apparently are numerous other forces which also shape the development of attitudes toward work (Chapters II, III, IV, V, and VII). Job dissatisfaction, for example, did not rise exclusively among those whose unique labor market problems have already been singled out by policy makers for special attention: the unskilled and poorly paid, and, in particular, minority group members faced with limited employment opportunities. Where job dissatisfaction has risen, the rise has not been entirely at the lower end of the occupational, industrial, and income structures, or only within certain age-sex-race groups. As another example, age-sex-race differences in the perceived payoffs to initiative are virtually nonexistent, despite the vast differences in work experience that exist on the basis of age, sex, and race. Still further, our attempts to assess the extent to which labor market forces impact upon attitudinal change have met with only modest success. Whether measurement error, so short a time period to assess changing attitudes, or omitted variables has limited our ability to uncover all the causes of attitudinal change cannot be ascertained unambiguously with these data.

Overall, the foregoing suggests that policy makers must consider numerous aspects of the quality of life that affect worker attitudes. At a minimum efforts designed to carefully monitor and chart the course of job dissatisfaction and other attitudes toward work appear to be necessary. If worker attitudes and preferences for various aspects of work change more rapidly in the future than managerial efforts to meet them, inattention to job dissatisfaction and other work attitudes may prove costly. The findings suggest that even straightforward and easily administered measures of worker attitudes as those used here would be valuable additions to the public's arsenal of social statistics.

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